othing is as, axciting as the exploration of Man'a past. And nothing is more fascinating than filling in the blank spots in our history.

One can almost say that the whale thing started with Helnrich Schilemann. the amateur archeologist who, as a young boy, devoured Homer's Iliad and who refused to come to terms with the contention that the battla for Troy sprang from o poet's imagination.

Schliemann searched for and discover-

The Hamburg journalist Gerd von Hassler seized upon a much more important evant in world history, namely the Great Flood with which God, accordlng to the Bible, punished Man for his sins and destroyed all life on earch with one exception: Noah and the inhabitants of his Ark.

Hassler is convinced that this Flood is nol a figment of tha imogination. After all, soma 80,000 publications in 72 lanquages deal with this subject.

The jaurnalist's studies ore based on the wrilings of ontiquity, above oil the Gligamiesch Epic (he wos a Sumarian king in the period between 2750 and

Schliemann's son Paul, the researcher Otto Muck (Alles über Atlantis -Everything About Atlantis - published by Econ Verlag) and the American Charles Berlitz (The Bermuda Triangle) are convinced that the Flood took place 10,000 years ago when the earth's axis slifted by almost 25 degrees. The basic elements fire ond water merged into a to their descendents a technical ond deodly chaos, destroying oll life in wide

Many scientists today suspect that a huge planetoid lift our corth at that time, srrives at the conclusion that Noah

 $V + \ldots <$ 

#### **BIBLICAL HISTORY**

## Noah's Ark actually crossed the Atlantic, researcher thinks

cause Noah - or whatever his name might have been - survived."

How was it possible for a man to escape this world-wide catestrophe? Hassler is firmly convinced that Nosh had a

He bases his contention on the Bible's description of the Ark, which goes as follows: "A box with e window on top and a door in the side."

If we translate window with hatch and imagine that all hatches were tightly closed (ssy with tar) except for a very amall manhole, the whole thing becomes feasible.

According to Herr von Hossler, "The door in the side corresponds to the gunports in naval vessels and to loading hatches in merchant ships. Only deepsea vessels with several decks are equipped with such hatches. And exactly this is what God ordered Noah to build: a triple-decker of closa to 4,000 tons

Even several thousand years later, the sea-going Phoenicians could only dream of such a vessel.

"This means," writes Hsssler, "that the survivors of the Flood listded down nautical knowledge which future generations no longer had, but which was preserved as o myth through the ages." Ho Saye Hassler: "This Flood has re- would have had no trouble crossing the mained in the memory of Msnkind be- Atlantic in his vessel,

A similarly fascinating speculation was put forward by the controversial Erich von Dänlken in his theory whereby Moses' scrolls were housed in a radar installation.

Old Indion legends in both South and North America repeatedly speak of tha white, besided gode who had come from

Accarding to Däniken they came from the stars while Hassler believes that they simply cama from "overseas." He seeks confirmation for hie views in linguistic and cultural eimilarities.

Thus, for instance, the Germanic god Wotan - always necompanied by a snake - suddenly oppears among the Maya Indians in southern Mexico as Uotan. And how, von Hassler asks, can one explain the similarities between the buildings of the Sumarians, the Egyptians and the Mayas?

Hassler's thesis about Noah's crossing of the Atlantic also explains certain slmilarities between the language of the Mayas and the Greek of antiquity. "There must be limits to coincidence" sovs von Hassler.

Nigel Davis is much more cautious in his book "Before Columbus Came".

Replying to the contention that South Americs was populated by people from the South Pacific, he writes: "The presence of a haudful of Polynesian words which vaguely correspond to one of the 2,000-year old languages of South As not much to go by." And n much of Hassler'e evidence is basel a such coincidental facts. such coincidental facis.

From the Gilgamesch Epic Hab deduces where the Ark made its lands According to the Epic, the suring lived "far away at the mauth of man But where were those nivers?

Von Hassler explares all possibility and the only convincing answer for he which tallies with the duration of & voyage and many other factors is the Amazon River. He believes that the theory is borne out by the fact it when crossing the Atlantic, Thor His dahl's Ra II was driven towards to Amazon by the Northeast Trades

Hassler's interpretation is quite in resting. After the destruction of the se canic island continent Atlantis and the resulting disastrous Flood, the Alland was for o long time covered by a kee layer of brimstone. According to Mut this light mass with a thickness of some 60 metres floated on the North Atlanti

As a result, the ferryman mentions in the Gilgamesch Epic could very al have been in o position to guide 11: bottomed ship across the brings layer which would have preventely major wave formation in the Atlanta

He could thus have taken Gilgames to the place where his sea-going for bears - the white gods - had our landed with their big sailing vessels.

It is, occording to von Hassler, to the people who landed in South Ameia that we owe the highly developed in sations of the South American Indians.

(Hamburger Abendblatt, 2 April 1919

Gard von Hassiar: Noahs Weg zum Amezons. published by Verlagsgesellschaft R. Glöss + Co



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Whynotlry HERL?

In an open sociaty discussion must be held and support canvassed. It is extremely difficult to sel change in motion, especially sweeping changes of a specific

A WEEKLY REVIEW OF THE GERMAN PRESS

## New balance needed in face of terrorist threat

DER TAGESSPIEGEL

Hamburg, 18 September 1977

Sixteenth Year - No. 805 - By air

It is still too early even to hazard a Lguess os to the mark that oscalating terrorist brutslity and a brand of terror that increasingly defles rational political explanation will make on State and society in this country.

Psradoxically enough, the very orlgins and continued existence of urban terrorism are due in no small measure to the fact that this country boasts one of the most open ond democratic systems there could possibly be.

One need hardly explsin why sn open society is specially vulnerable to acts of violence. The culprit has at his disposal all the fscilities we treasure, and rightly so, as freedom from excessive govennment regimentation.

Free from excessive government intervention in the conduct of his daily af-fairs, the terrorist is at liberty to seek refuge behind society's scale of values in order to snipe st these very values.

This country can pfide itself on enjoying the greatest degree of constitutional freedom a German State has ever boasted. Bonn chose to opt for constitutionsl liberties because Germans had just undergone an era in which the totalitarish State had reached rock bottom.

Basic rights of the individual sre constitutionally guaranteed and the system of government is run on federal lines with a view to forestalling excessiva resort to authority even though government may prove less effective as a re-

Yet this country has proved extremely effective, which will have come as a surprise to sceptics, while others may feel It demonstrates how night we were to place our trust in democracy.

It is fair, to assume that in the long run our system of damocratic government will not even be shaken by the activities of politically-motivated solvocates of violence as long as people in this country retain confidence in and loyalty towards democracy.

It is substantially more difficult to sea why our open society can have given rise to terrorism. Maybe by virtue of the very fact that it spurns both violence and authority?

In an open acciety, groups that are sold on certsin ideological notions and fascinated by certain higher objectives to which, they feel, State and society must be subordinated, will tend to feel that the prevailing system is decadent, boring and deserving of a swift and violent

The more radical the objectives, the more difficult it is to gain support, with the result that before long a number of firebrands will try to cut tha Gordisn knot by resorting to violenca.

Having failed to mobilisa mass sunport, they are bronded os outsiders, and since they seem likely to remain so they decide to make a virtue out of necessity and heighten their outsider status by resorting to terrorism.

In other words, the open society will tend to spawn desperadoes by virtue of the very fact that it affords protection from on extremist takeover and subordination to radical objectives.

What is more, the more starkly the general feeling of prosperity and wellbeing stands in contrast to the emotional tenor of the extremists, the more likely an open society is to spawn despc-

This, then, is the state of affairs that liss led to the situation with which we are now confronted. We must redouble vernment and its agencies, while at the same time taking care to ensure that the open society does not pass s point of no return of which the State forfeits its le-

Terrorism must be dealt with, but not by sacrificing the values that make an open society what it is. We must not allow terrorist provocation to mske the sccusations the urban guerrillas level at acciety aelf-fulfilling prophecies.

A new balance must be established in tha face of threat, a balance recently defined as follows by Neue Zürcher Zei-

"There may be more deaths but the State need not collapse as a result. Confldence in a system of government that enjoys majority support in the country st large entails a twofold determination.

"While there must be no question of premature restrictions on basic rights people must also be prepared to accept genulnely necessary measures to maintain public security without immediately prophesying that the writing is on tha wall for liberal democracy in the Federal Republic of Germany."

In the context of continual endeayours to strike a balance the way this country is viewed by its European neigh-

### IN THIS ISSUE

HOME AFFAIRS Struggia for a silce of the world wide aconomic cake is gatting mora competitive

TERRORISM . Tha damocratic State is

illmited in its powers

TECHNOLOGY Page 7 All the latast in sight and sound at the Berlin radio show.



C 20725 C

Chencellor Helmut Schmidt, Foreign Minister Hans-Diatrich Genschar end stata secretary Andrees you Schöler of the Interior Ministry (from right to left) ore seen on the government front bench in the Bundastag on 8 Saptamber as the House observed two minutes' sliance as a mark of respect to the men who lost their lives in the terrorist abduction of employers' leader Hanns-Martin Schleyer.

lacking deniocratic forces in this coun-Views and reactions voiced by neighhouring European countries can prove try, specifically including Bonn's Lib-Lab helpful; they can also bedevil relations coalition of Social and Free Democrats, between countries for far too long glving rise to anxiety ond slarm.

Take, for instance, what has proved a fsr from uncommon French viewpoint on terrorist violence in this country. A number of French commentstors are talking in terms of s sick society ot long

last testifying to its inner contradictions. This country's democratic government is smugly made out to be virtually on a par with its urbsn guernillas. The extreme power of the State is contrasted with extreme radicals or even "advocates of progress" who sre at war with the

The French really must have felt this country to have been an intolerable burden as long as it appeared to be a smoothly-running, unruffled and powerful democracy. The discovery that society In this country too has its ills must have come as a relicf; it certainly comes as a change from bad news about

Le Monde has been particularly keen to throw stones at this country. This is hardly aurprising since the prestigious Paris newspeper is no longer as independent in editorisi opinion os it once was.

Il now backs the Union of the Left, France's electoral alliance of Socialists and Communists, and appears to be at-

EDUCATION

PUGWASH CONFERENCE

300 dalegates attend this

year's discussions in Munich

Amsteur athletics World Cup

may become a regular evant

nous for European Integration, for Franco-Federal Republic ties and for the labour indvement in Europe as a whole."

Herr Volgt claims that If euch a distorted view of the situation in this coun-Scientists discuss structure of try is ollowed to predominate there can matter at Hamburg symposium no longer be any question of left-wing criticism in a spirit of solidarity and in-Atl universities in Europe ternationalism. should be European in their outlook, say axperts

Continued distortion would merely testify to the reawakening of soi-disant left-wing but in effect nationalist preludice in France.

by way of an alibi.
Altacking Bonu, then, is intended to

provide an alibi for pretensions to save

Even in France this interpretation of

affairs has come in for criticism, criti-

cism which, it is only fair to add, has

not gone unmentioned in the columns

Le Monde recently printed a letter

from Ksrsten Voigt, a former leader of the SPD Young Socialiats and now a So-

cisl Democrat who represents a Frank-

furt constituency in the Bonn Bundes-

the Bonn government in terms of Sta-

lin's hateful catchphrase "social fas-

clsm." Social fascism was originally

Communist jargon for the policies pur-

sued by German Social Democrats be-

Ksrsten Volgt is indignant that the

term should still be used to justify, al-

belt Indirectly, murders, kidnappings and

If French left-wingers really are con-

vinced, Voigt argues, that Social Dem-

ocracy in this country is a precursor of

fascism, then the prospects look oml-

bomb raids in this country.

Volgt objects to French criticism of

democracy in France by advocating coo-

peration with the Communists.

of Le Monde.

fore the war.

True enough, the situation in France seems unlikely to lend this country

Continued on page 3.

# Struggle for a slice of the world-wide economic cake is getting more competitive

Le Figuro recently noted that Europe is going to heve to taam to rely less than It has done in the past on thia country ea the economic backbone of the European Community.

The German economic miracle la now no more than a fond memory, the Paris newspaper editorialised, and the Federal Republic of Germany is increasingly coming to resemble its neighbours.

The points of similarity, the French ieader-wilter claimad, includa iack of mobility on the part of the labour force. inciplent disgruntlement on the part of the trade uniona and demoralisation on the part of the employers.

Is this e totally inaccurate assessment? Certainly not inasmuch es il pinpoints a sense of diseppointment that this country has so far feiled to wrest itself and others from the ciutches of a slough of economic despond.

This disappointment is deep-seated. Both et home and ebroad people heve grown accustomed to regarding this country as a model of steady economic growth, full employment and in international terms, tolerable rates of inflation.

· Here in this country these parameters have been rated the normal economic state of affairs. No ona seems willing to accept the idea that it might ectually have been excaptionel and that the going has been ao casy in recent years that people have come to regard too much as feasible.

Panic reactions here and there occur as e reault. "Changing the system" is no ionger a mere revolutionary catchphrase; larger sections of a wider public atart to call for aweeping changes. Above sil, government action is called for in Increa-

singly urgent tones.

Calls such as these are, of course, iliogical from the putstive outset. Economic recovery aurely necessitates carefully nurturing the economic factors that have

served the country so well in the paat. What is more, the government cannot hand out more than the economy yields. indeed, in a country which is as dependent on exports as our own, the vardstick of handout potential is not conomic performance, but export sates,

What advocates of drastic action and panaceas of one kind or another invariably tend to forget is that this country is still much better off than others, so the higher levels of output, exports and whatever which the Federal Republic of Germany has achieved in the past are

still delivering the goods.

Were people only prepared lo compare this country's economic position with thet of its neighbours, they might elso appreciate that Bonn cannot in the long term remein the exception rather than the rule when its neighbours ere permonently in a less enviable economic

The crucial fact however, is that we are probably not merely undergoing the vicissitudes of economic ups and downs for which this country ought, in theory, to be better prepared than in the past.

When not even the United States

commands sufficient economic power to start the world's wheels turning again something different must have hap-

we are, in fact, currently experiencing an intensified struggla for the diatribution of economic spoils between the



various parts of the world. The 1973/74 oil crisis in the wake of the Yom Klppur War was no more than aymptomatic of this struggle.

This atruggle for a fair share of tha world's economic potential involves both commodities and energy on the one hand and the proceeds of gainfully employed isbour on the other.

For the duration of this struggle the factors that govern the world economy will no longer be measurable solaly in terms of economic cycles because, fundamentally, they are political in nature.

in the industrialised countries this political dispute has immediate economic consequences. It is not merely a metter of swift structural changes resulting in capacity not being fully utilised.

It will necessitate e completely new process with every technological leasb being strained to maintain output at less expensa and by dint of less isbour and to do so with a view to making manufactured goods more competitive.

The struggle for a slice of the cake will clearly be a struggle to prove more competitive, end if, sa seems more than likely, this will prove the case, we shall have to accustom ourselves to living with a higher level of unemployment than has been customary in decades of virtually full employment.

People are reluctant to face up to this particular fact, and not only because it entails a number of unpleasant consequences, but elso because the powers that be are afraid of having to tell people they will have to lower their expec-

Gonc ere the days when the pundits were proud to be the harbingers of unpalatable truths.

A number of trutha can nonetheless be told, if a substantial proportion of the labour force is permanently unemployed (the jobiess need not elways be the same people, of course), then a larger share of what the employed earn (or of the domestic product per se) must be set aside for the jobless.

This is bound to heve repercussions on the terms trade unions can expect to negotiate for their members - even though the unions may be reluctant to accept the fact.

As for deductions, welfare contributions are sure to increase. But they can only be increased further if the State forgoes higher taxation for purposes of general expenditure.

Contrary to what is generally claimed. the State is going to have to cut back ita apending to the necessary minimum.

A number of welfere considerations also arise, particularly in the family context. Is it fair for both husband and wife to go out to work merely to maintain ilving standards when the breodwinners in other families are obliged to draw unWhat is more, greater mobility a bour seems likely to become indicate able. No longer can people specification earn e living in one locality all a

Smaller-scala redistribution of the bas frequently been undertaken in b paat. Take, for instance, I reinlie schemes in the course of which he miners were taught motor industry des. Instances of such mobility led be forgotten.

There ramains a further, far no complex sector: unemployment and young people. Everyone is agreed a something must be done and done h to combat youth unemployment.

In order to ensure equality of comtunity for all in future, youngsters me at least ba given preferential frealment inasmuch es career training facilities placed et their disposal.

Yet here too psychological and aci problems arise. In the past it has him been noted that educational district tages ere a handicap in later life. The conclusion reached, however u

that e good education and career by ing would necessarily assure the mo ents of improved social standing. In all probability not everyone can

tomatically expect any longer to E employment in keeping with his at education or career qualifications.

At all events the ideas of social pie lega accruing from better education ne no longer prove accurate. So education must be viewed as 2

osset in itself, whereas actual emploment will depend on the state of the it market at any given time. Mobility & certainly be required.

This is not to say that solutions in already available, but surely it is about time the decision-makers were seen k be devoting thought to the decision that lie in atore.:

(Der Tagessplegel, 4 September 1973)

## Battle on three fronts against joblessness

he main topic of debate in the Bundestag following the aummer recess is as urgent as it is confusing it concerns a large-scale economic and finance programme.

Proposals in this connection are as numerous as they are varied, end the final decisions are still uncertain not with standing, intensive preparation.

All in all, a classical aituation of confusion prevails -a confusion which has proved to be a maze even for experts, let alone the man-in-the-atreet.

This state of affairs is not least due to the fact that our politicians are bent on e campaign on several fronts. They want to combat unemployment while at the seme time achieving aocial effects end doing justice to the exigencies of foreign

Due to the latest unsatisfactory statistical data the fight against unemwaged along three lines: by tax relief fdr business (aimed at releasing funds for Investment), by fiscally unburdening the consumer (aimed at promoting demand) and by government measures.

• The first objective is to be served by better dapreciation facilities for capital goods and in connection with research programmes as well as by a Ilmited tax rejief under the -Stability Law, which would benefit business through corporate taxation.

But such measures would be more

likely to serve the second objective, namely to provide relief for the consumer et large, in other words, the mass of wege earners and tax-payars. This purpose would be achieved by increasing the basic tax-free amount and the taxfree portion of the Christmas bonus, ...

Government measures would include the additional amployment of civil servants and the lowering of the pensionable age as well es the granting of more development eid in the hopes of atepped up orders from the recipier opuntries, as well es additional invest ment programmes by government (Federal, state and municipal).

Each of these major proposals under discussion has its underlying motives in the realm of aocial policy. Tax reliaf is to endow tha Soziale Marktwirtschaft (Free Market : Economy) with more всоре, с эта байриал, рергоз орг су аградора

"Left" groupings suspect that this is intended to add to the privileges of high eamers. These "leftists" want to provide above all relief for the incomes of the masses in order to achieve a more equitable distribution of wealth.

It is furtharmore obvious that the same elements favour government intervention. The state of the s

And finally, there are foreign policy considerations at stake. Above all the United States has for some time been pressing Bonn to give booster shots to

tha aconomy priority ovar monetary 5

The atrong deutschmark has been thom in the flesh of other industrialist notions; and this might account for @ tain enti-German tendencies that he made themsalves felt latterly.

A more inflationary policy - the would emount to forgoing certain is revenues while et the same time sleft ing. up state; expenditures. -- would doubtless simprove the etmosphere & tween the Federal Republic of Germin and its pariners.

Although the meshing of economic finance, social, and foreign policy work powdoubt the appropriate; it is extreme difficult to win such a war on seve frontsidi in bede project Co ded il . c Economic, pragmatism, financial por or all of Continued on page 102 to

The Germair Tribune

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n: Micorrespondence please quole your althou number which appears on the wrapper, by startaks, above your address.

DEVELOPMENT AID

No. 805 - 18 September 1977

## SPD faces a tough choice on aid policy

by the principle of eliminating hunger

and poverty in the world, of defending

A thousand million people are leading

a life of utter poverty and misery todey.

Children become mentally defective

ationtly aftar birth because the lack of

protein in their food means that the

SPD politicians in government office

are fully eware of the gravity of this ai-

tuation. But they also have to consider

whether the proposals end demands

being mode in some quarters can be re-alised in practical, political tarms.

A peper on development aid la now

being worked out ond will be presented

to the perty delegates at the party con-

ference in Hamburg in November. They

The tecent forum in Wiasbsden did

not come up with definite proposals or

point out a clear direction for the future.

Cartainly possibilities were looked into

and outlined. Policies can only be put

into practice when they are supported

There secins to be a lack of awareness

emong people in this country that the

ald given to underdevaloped countries is

ultimately in their interest as well.

swer to the question: by whom?

This much ia clear: to ensure the con-

tinuing supply of vital raw materiala and

to protect our presentand future labour

markets, we have to help the underdeve-

loped countries to build up their eco-

This increases their purchasing power

From en economic point of view, all

this is perfactly ressonable. In practical

terms, though, it means that certain

branches of industry will have to be

abandoned. The Third World is not pre-

pared to wait for a gradual readjustment

of our production structures. This was

(Stuttgerter Nachrichten, 3 September 1977)

Manfred Beer

mede clear et the Wiesbaden forum.

Development eid -

where it goes .

Cliaterel public sid by the

1950-1975 In thousands of

Faderal Republic of Garmany

and brings in export orders for German

industry. And this in turn protects jobs.

justice end social progress.

brain cannot devetop.

will then vota on it.

by majoritles.

economic aituation.

Lither more jobless in this country or ty; on the other, it takes the idea of international solidarity aeriously end stands Third World. This seams to be one of the choicea facing those who ere looking for alternative ways of giving aid to underdeveloped countries.

If we opaned our markets without restriction to finished products from the Third World, particularly textiles and ahoes this could mean that our markets would be flooded with cheap products. As a result, e large number of Garman firms in these branches would go to the wall. They would simply ba unable to

This is the dilemma in which the SPD finds itself at the moment.

On the one hand it is committed to defending the interests of the German worker in this period of crisis and anxie-

#### New balance

Continued from page 1

much comfort. Even the government has taken to opportunism in its attitude towards Bonn - no doubt with domestic developments in mind.

In comparison the course of eventa in this country as seen by the British media is described for the most part in terms which are scrupulously fair.

British commentators appreciate the difficulty Bonn is having in trying to cope with terrorism as a State that has

Inasmuch as British observers feel the situation in this country to be typically German, they refer to a "combination of criminal energy and the desire to prove perfect and absolute," to a disinclination to compromise of whatever kind and to the ausceptibility to nihilism that is characteristic of German terrorists and their

sympathisers. Few additions need making to this assessment. We too are opposed to the terrorista because they appear to personify in perfection German traits of character that have proved disastrous in the past. (Der Tagesspiegel, 11 September 1977)

#### Continued from page 2

sibility, ideology and the tactical objectives of the various political parties in many instances hamper each other.

In most cases the differences of opinion are not reatricted to opposing parties, but run straight through the Coalition and the Opposition since each of these groupings has its "rightist" and "leftists" trends.

Moreover, Bundestsg and Bundesrat, both of whose approval is required for most of the envisaged measures, are dominated by different mejorities.

Thia being so, a large mejority composed of all parties will have to be found for the proposed measures, in this connection, the FDP (which is in coalltion with the SPD in Bonn and with the CDU in some Federal states) might well

play a key role.

But even the latest statement by Chancellor Helmut Schmidt gave no indication as to the final common denominator that will have to be found; ..... Heinzgünter Kjein

(Der Takessplegel, 3 September 1977)

Pertners to the developing countries Sheres in non-Opec developing countries import-export trad

## Bonn to increase development aid budget by 19.8 p.c.

Minister of State Hons-Jürgen Wischnewaki mada the position clear right at the beginning of the conference on development.

Announcing that the government intended to increase the budget for developinent by et least 19.8 per cent, he took at least some of the wind out of party critics' sails and et the same time showed the Third World countries that Bonn is prepared to make its coutribution towards a fairer economic balance.

This sign will, we hope, be under-Secrifices will hove to pay made to stood by the developing countries and finance development programmes and it the other industrial nations: as an ailunderstandable that people are not swer to the justified demands the noor enared to make them in the present countries are making of the rich, end as an example for other nations to fotlow. Clearly, sacrifices have to be made, but the Wiesbaden forum gave no an-

The Bonn government hopes to achieve three things by its decision in principle to raise the development budget twice as much as the rest of the total

It wants to meet the expectations of the Third World as far as possible. It wants to underline the fact that it cannot, and does not wish to, ebdicate reaponsibility for giving moral aid to the poor countries. And finally this country protecting its own economic interesta this move.

By increasing the purchasing power of the developing countries, it is helping its own axport industry. Proposals made by Marie Schlet and others have quite clearly had a positive effect, as these measures show. Karl-Ludwig Kelber

(Lübecker Nachrichten, 2 Saptember 1977)

Egon Balır, general secretary of the SPD, has called upon the Social Democrata to ensure that more importance is ettached to development policies in this country. Speaking at the end of the two-day forum on development in Wiesbaden, Herr Bahr pointed out that the contribution that "the rich Federal Republic of Germany" made to development in the Third World was not as high, as the average in other Western Industrial countries and certainty did not correspond to its economic potentiet. Bshr stressed that an SPD govornment would not limist on good belia-

viour from recipiant countries before granting development aid. It was up to each country to choose its own wey. Clearty referring to the CDU/CSU,

Aid should be given

higher priority,

says Egon Bahr

the SPD politician said that those who rejected the struggle by the majority for political power in aouthern Africa had forfelted the moral right to compaign selectively for human rights. The rights of black people were of no

less importance than those of people "calling themseives diasidents." In the struggle for freedom for the majority. there can be no neutrality for Social Damocrats.

He went on to urge the government to maintain its poticy of not supplying smis to freedom movements.

Maric Schlei, Minister for Economic Cooperation, pointed out that if the neccssary credita were provided, German industry could receive orders from deof about a thousand milition marka.

The minister went on to any that "theae orders for investment goods are extremely important for emptoyment in this country." Her proposals had been rejected by Chancellor Helmut Schmidt and Finance Minister Hans Apel at a

cabinet meeting the previous week. Frau Schlei pointed out, as Egon Behi had done before her, that German aid to the Third World represented only 0.3! per cent of gross national product.

The twenty per cent increase in the development budget for 1978 to which the cabinet had given its approval would mean that Germany would reach the everage of the other western industrial nations. (From 3.2 thousand million in 1977 to more than 3.8 thousand million

The minister etso spoke in favour of setting aside 0.7 per cent of the gross national product for development eld in the 1980s, as recommended by the

United Nations. The Federal Government and Parliament would therefore "closely examine" ways of passing on the Mershall plan aid which this country was given thirty years ago to "those whose need is grea-

Halmut Wilhelms, board mamber of Slemens, stressed that "the more we secure and develop our industrial potential ... the greater out chances are of remaining a powerful industrial nation end ensuring long-term security of employment," But till men it and it

The CDU has also declared itself in favour of more development ald. MP Volkmar Köhler regretted that the agreement to increase the development budget was announced at a party conference and not to parliament. no de de de la company de Hoiny Heck'

att all a the (Die Well, 3 September 1977)



Social workers

Danial techniciens

**Doctors and dentists** 

Compular operators

Kindargarten workars

Primary, secondary and special school

Senior white collar

Managers

8.6

in this connection to introduce em-

ployment premiums for companies pro-

viding new training facilities and lobs in

underdeveloped regians or in particularly

forms could also help to alleviate the

problem. Short-shift work, for instance,

of preventing redundancies by distribut-

ing production shortages caused by in-

The same should be feasible on a lar-

ger scale. Thus, far instance, an earlier

introduction and full implementation of

the campulsory tenth year of schooling

would reduce Germany's labour force by

And since this measure has in any

event been envisaged for implamenta-

tion in 1985, it would only be necessary

to Introduce it a few years earlier when

this general educational aim would coin-

cide with the exigencies of labour mark-

hard-hit branches of industry.

tion of new jobs.

employment.

adequate orders equally.

some 200,000 by 1980.

#### **TERRORISM**

## The democratic State is limited in its powers



his country's urban guerrillas heve L long since crossed the murder threshold, but whatever the reasons may be, their readiness to resort to violence has escalated, as the ebduction of Hanns-Mertin Schleyer, the industrialist. in Cologne proved.

Herr Schlaver's driver and three police officers acting as bodyguards were gunned down in cold blood in order to get on with the abduction, which only goes to show how these fanatics have cast their inhibitions to the winds.

There can aurely no longer ba any gainsaying that they constitute a fatal threat not only to their immediata victims, but also, in tha long term, to lha country's democratic system of govern-

Total disregard for human life in alleged pursuit of higher objectives was once equated with fescism in Germany. There is no reason for departing from this assessment. To try to pigeonhole cold-blooded murder politically is to disregard reality.

The crucial question we shall all have to face will crise when the culpits name

T hey regard themselves as revolu-tionaries and at times even (with a

hint of national pride) as "German re-

ion is concerned, they are supply terror-

volutionaries". But as far as public opin-

There are people who feel they could easily take e snap decision were tha decision theirs. They usually call for uncompromising refusal at any price to contemplate giving in to terrorist blackmail — in the interest of the State end its citizens as e whole.

There are indeed demands which are so inordinete that they cannot possibly be met, but many people wili recali the thought-provoking comment made by Bonn Interior Minister Werner Melhofer.

The State'a battered prestige can always be repeired, ha noted, but there is no way in which the loss of human life can be made good.

Professor Maihofer made this comment in connection with the abduction of West Berlin Christian Democrat leader Peter Lorenz, whosa life was saved by flying gaoled terrorists out of the country to a deatination of their choica.

Terrorists later raided Bonn's embassy in Stockholm with a further blackmall bid in mind. On this occasion Bonn refused to yield to their demands, but the outcome could hardly ba rated a success in combating terrorism either.

At the time of writing no one knows for sure whet has happened to Hanns-Mortin Schleyer and whet demanda may their terms. How ought the government be made, but advacates of raison d'état

at ell costs (most of whom will hold political views similar to those of the amployers' leadar) will certainly be forced to think again.

They will surely have second thoughts about the terrible responsibility leaving another human being to the tender mercies of his potential murderers entails.

I continue to feel there can be no question of sacrificing hostages unless, that is, the cost of securing their releasa would prova to be a fresh spata of murders committed by the fanatics released in exchange.

One point is sure. It is infinitely difficult to draw the line end distinguish between the ilmit as fer as the State is concerned and the limit es far as the people who represent it are concerned.

If this country really were a fascist instrument of human destruction as its fanatical enemies claim, if it really were a police State heading towards dictatorship, as lawyer Klaua Croissant, who has sought political asylum in France, claims, then no one would stop to think about matters such as these and no one would feel in the least unsure of them-

Under a dictatorship human life counts for as little as it does in the eyes of terrorists. There is nothing to choose between tha two in the cold lack of moderation in their choice of responses. The truth no doubt is that the terror-

ists know only too well how objectioneble tha vast majority of people in this country feel all forms of violence to be. The mejority want to live in a country in which violence is not considered a

valid means of conducting political dis-

has a plausible explanation for the atti-

According to him, they ere striving

tudes of these young people.

them as being too unwieldy.

strategy:

ery politics is of necessity criminal."

ed to achieve their final goal, namely a

While on the one hand their peace-

able comrades tried to imbus the people

In fectories, universities, schools, homes,

etc. with the right political ideas, the

socialist society, by means of a two-way

putes. Even if we knew with ebsoluta cer-



tainty that what the terrorists want ka expose the aensitive nerve-ands of the democratic system and thereby lar le en alieged weakness, no one must an them the satisfaction of doing it li way and reverting to the law of &

It is not all that long since fands right-wingers glued a photo of HA Brandt on the bull's eya prior to she ing practice. Now it is the self-pr ciaimad left-wingers who print unk ground pampillats in which rifle tight are superimposed on photographs d their political enemies.

The ideology Is the same. A democacy that intends to survive cannot affect Werner Holzes condone it.

## The urban terrorists -German style

It might perhaps be more accurate to refer to them as urban guerrilleros since guerrilla warfare has becoma a apecific tha time as follows: form of political terrorism in our cen-

In the Federal Republic of Germany they first gained notoriety soma seven years ago as the socalled Red Army Army Faction (RAF). The RAF chose as their emblem the five-pointed star of tually are. the Uruguayan Tupamaros, adomed with

"And how easily can such a state of an American suh-machine gun. The overwhelming mejority of our people is to this dey unable to understand how it could be possible for a terrorists movement to declare war on out end out neck-or-nothing concepts." the state and social order in a country

such es the Federal Republic of Germany of all places, bearing in mind that conditions hera can certainly not be compered with those of, say, Vietnam or But aven so, the late Ulrika Meinhof. ona of the RAF leaders, maintained

"thet the organisation of armed resiscollective guilt. tanca groups at this time in the Federal Republic of Germany and In West Berin is right, possible and justified, The founders of the RAF acted out of

a sense of frustration ohout tha (for all started for me, it would be fascism them) unsetisfactory outcome of the 1967 student revoit. They had neither had escaped it, But even after that era the inclination nor the patience to embark on the "long march" through the somehow ... I wanted to become one of institutions of our state es advocated by Rudi Dutschke, left wing student leader

Horsl Mahler. Iha former lawyer, and ettorney for APO (the extra-parliamentary opposition), who turned his back on tion of the fathers found its culmination which was to be on standby until the the guerrilleros during his term in pri- in Gudrun Ensslin's (born 1940) exclain masses were rips for revolution.

son, in retrospect describes the mood of mation: "You cannot talk with people

"It can only be termed deeply frustrating to recognise the necessity of a revolution with growing clarity and yet to ba unable to know who and where the revolutionary class, in other words the beneficiaries of the revolution itself, ac-

affairs lead to a mood of desperation! "From there, via an abstract identification with the liberation struggles in the Third World, the further course led to

But the leading figures of the first generation of terrorists - epart from Mahler and Melnhof, Gudrun Ensslin and Andreas Baader - were not only tha flotsam of the student revolution, but also late victims of their nation's Nazi past, which they were unable to digest. They auffered from a feeling of

An English authoress, recently referred to them as the "children of Hitler".

Says Horst Mahler (born in 1936): "If I were faced with having to tell how it thot would come to mind. Outwardly, I the 'other Germany."

Ulrika Meinhof (born in 1934) was never abia to forget the day when her aunt was taken to Ausohwitz concentra- armed commandos were to attack tha tion camp. Her contempt for the genera- state and eventually establish a red army

who made Auschwitz." Such emotional conflicts remained alien to the second generation of terrorists.

These truant children of our affluent soclety are either revolted by the materialism of thair upper and middle class families or - as people who wanted to against arrest and torture in Brazil').

But the terrorists also learned the climb tha social ladder - frustrated by their future prospects, thwarted by the

Interior Minister Werner Maihofer, a liberal theoretician and, in his function as the supreme head of the police force, in charge of the fight against terrorism,

The structure of the commandes #

for a better world, but wera unable to convert their revolutionary impulses into a commitment for reform in good time because day-to-day politica is viewed by bank robberies ("dispossessions").

Thus they wound up in a cul-de-sac of murder, manslaughter and bank rob-As Horst Mehler put it: "Revolutionids and other weaponry (such in Karlsruhe) ere home-made. These self-styled revolutionaries want-

3. So-called conspirativa apariment

sidential areas end et times in basement end backyerds), but usually in her still partly empty apartment houses.

4. The required mobility and that atant change of position requires cars. These either stolen or obtained fake rentals and subsequently dod. by specialists.

Continued on page 51

Hanns - Martin Schleyer

(Frankfurter Rundschau, 7 September 1973)

The RAF and the arganisations had either succeeded it or competed with

(Movement Second June, Red Cells w) the Haag-Maler Group) have religiously edhered in their actions to the farmula provided by their foreign idols.

Among these is, for instance, it "Handbook of The Urban Guerrille" by the Brazillan Carlos Marighela (thi book was initially distributed under its counter until it was published by Rewohlt Verlag in 1971 "not as an instrution for bombing games in a highly is dustrialised democracy but out of protes

trada from tha satirical "Anarchistic Cookbooks", from military instructions for guerrilla warfere, from newly-published works of Russian Nihilists of simply from textbooks on chemistry.

ways follows the sama pattern, and is; ere organised with German thorough

I. The necessary funds of consider abla magnitude which are needed for both living and warfare are obstained by

2. Arms and ammunition are usually purchased ebroad or stolan from millian arms depots, while bombs, Incendiary "Stalin Organ" which was recently ""

are rented (at times in rather chichi sidential areas end et times in basemen

5. Other material such as passpo

**JOBS** 

## New study lists four ways of boosting employment

But auch a growth rato (even if the

number of foreign warkars were to di-

minish) would not suffice to establish

full employment by 1980. This target

Experience shows that the classical

instruments as used in the employment

promotion law, among them subsidlea for short-shift work, job Incentives, fur-

ther vocational training and retraining as

well as general eniployment promotion

measures, can only alleviate, but not

cure, the problem of underemployment.

As a result, we need new employment

strategles which go fer beyond the con-

ventional means of providing employ-

ment. A new and hi therto unpublished Prog-

nos study, which was commissioned by

the Bonn Minister for Education and

Science, Helmut Rohde, lists four pur-

pose-oriented measures by which to

In its study Prognos suggests a mas-

sive promotion of technology as a

means of solving world-wide bottlenecks

which, it anticipates, would provide

Modernisation and rehabilitation nica-

sures in the housing and urbenisation

sectors would provide an estimated

Stepped-up employment of society's

marginal groups could account for an

creased development aid is estimated at

being capable of providing employment

According to the study, this primary

effect accounting for some 900,000 jobs

would trigger a secondary effect which

would provide employment for an addi-

Thus full employment for e labour force of some 27 million could be

Additional measures in the taxation.

levies and subsidies sectors could serve

ss a supplement to the traditional in-

achieve full employment.

400,000 additional jobs.

far another 200,000.

tional 300,000.

150.000 jabs.

could not be achieved before 1990.

ot only the study by the Prognos tional jobs by 1980 and approximately 1.5 million more jobs than in 1975 by which predicted that the Federal Republic of Germany would have 1.5 million unemployed by 1980, has caused a considerable stir among the public; equally disculeting was the review presented by a member of the Federal Labour Office's Institute for Labour Market and Vocaionsl Research.

The author of the latter study figured out that in order to reduce unemployment in the Federal Republic of Germany to 500,000 an economic growth rata of 6 per cent per annum would be

Should this target not be achieved and should the growth rate continue to hover around the 3.5 per cent mark, the high rate of lablessness would remain with us until 1985.

Should, on the other hand, the growth rate drop to 2.5 per cent, there would be close to three million people out of work by 1990.

The author points out that the supply of labour - due to demographic deveionments - is at present undergoing e fundemental change in trend. Whila the labour potential diminished by close to two million people in the period from 1960 to 1975 and as a result foreign labaur had to be recruited, the next 15 years will make tha people resulting from the heavy birth-rate yeers of the fifties and sixties swell the labour mark-

This will coincide with an era of uncertainty as ta the availebility of an adequete number of jobs.

In other words, the Federal Government is at present faced with the dual problem of providing amployment for our one million jobless of today and of provoding an additional one million new jobs for the future.

A mere one per cent difference in the annual growth rate during the period from 1980 to 1990 would account for one million jobs more or one million

Assuming an annual growth rate of 4.5 per cent, there will be 400,000 addi-

Continued from page 4

licences, rubber stamps

struments of labour market policy. It would, for instance, be conceivable

achieved by 1990.

forms are also obtained by theft and forged by professionals. Two-way radios are simply bought, usually in leftist The Baader-Meinhof group was ap-

prehended by the police as far back as tha summer of 1972 and before if had a chence to develop properly.

It foundered on its own errors judgment and, above all, on its isolation within the ultra left satup.

They falled in explaining the meaning and the purpose of their actions to the masses - as for instance why two simple workers were injured in their bomb attack on the Springer Building in Hamburg.

Some of their successors have learned from these mistakes.

Thus for instance the Movement Second June published documents following the kidnapping of Berlin's CDU Chairman Peter Lorenz in order to discredit his way of life and to show the financial manipulations of his party. The Red Cells, on the other hand

tried to gain popularity by incendiary attacks on the dossiers of citizens who has been caught riding on the city transit system without tickets and by an attack on the real estate speculator Gunter

Following tha defeat of the first guerrilla generation It inItlaily seemed as If the police had gained the upper hand over terrorism. The hard core was behind bars while the small number that remained was isolated end without leaderahip and intellectuel guidance.

But the RAF continued its fight from tingly eided by their attorneys and other visitors, the prisoners succeeded in developing sn information network between tha individual prisons and with sympathisers at large.

Following the spectacular actions in the spring of 1975 (Lorenz kldnepping and the attack on the German Embassy In Stockholm) police, the Internal Secu-rity Agency and the Department of Justice engagad in a second major campalgn as the result of which many terrorists were apprehended and brought to

lustice. The successor groups were forced to seek a temporary haven abroad. And those who remained et home organised themselves in small cells which were virtually Impenetrable for the netion's secret service.

Meanwhile, the urban guerrilleros have stepped up their terror actions both quantitatively and qualitatively such an extent (assassination of Chief Federal Prosecutor Siegfried Buback and the banker Jürgen Ponto as well as the kidnepping of Henris-Martin Schleyer) that they need to shirk comparison with the scks of the spring of 1972.

State and society are once more faced with a challenge.

But aince they cannot à la Hitler "counter bruta force by brute force" the attackers will retain their advantage over the defenders; and the actual question facing us is that which the London historian Walter Laqueur recently posed when he asked: "Whet is the price that will have to be pald in order to eliminate terrorism?" Karl-Heinz Janssen

(Dia Zelt, 9 September 1977)

temparary lowering of the flexible retirement ego would provide relief. in quentative terms, the lowering of the retirement age to 62 would withdraw

It is also no secret that o lasting or

Tellors

**Building workers** 

Post Office engineers

Carpenters and Joiners

foundry workers

Iron and stael workers

CONDOR

15.4

16.3

17.7

18.5

19.5

20.8

22,5

Winners and losers in the lobs market

Workers in selected professions: Development 1973-76 in percentages

between 50,000 workers in 1980 and Moreaver, orders, subsidies, credits, 100,000 in 1990. Should retirement sge guarantees and preferential taxation ba lowered to 60, the figure for 1980 could be made contingent on the creawould he 150,000 and 230,000 for 1990. On the other hend, there can be no Direct government measures such as doubt that a further reduction of weekly compulsory employment must be con-

working hours would cause organisationsidered, says Proguas, especially in those al problems for business. instances where specific companies con-Another problem fraught with diffitimuously operate extra shifts or provide culties is the question of organising a overtime during a period of high unfurther reduction of working hours in such a manner that no labour-saving Shorter working times in various productivity increase leads to excessive

increases in production costs, thus hampering economic growth in real terms Cost considerations should be taken inta account when mapping alternative

labour market strategies. By and large, governments have under-estimated by far the cost of unemployment. The average expenditure and revenue shortages of governments (Federal, state and municipal) amounted to DM18.510 for each jobless in 1975.

By comparison, the average expenditures of the Federal Labour Office in providing employment measures amounted to about DM16,000 per work-

This demonstrates in which direction considerations of costs in assessing the other measures aimed at diminishing unemployment must go.

With regard to the strategy aimed at reducing working times, the trade unions and menagement would have to arrive at some agraement concerning wage offsets.

Based on former experience with shorter working times, about one-thord of the ahorter working hours was offset by increased productivity, while twothirds led to additional employment.

As a result, it would be reasonable to apply a two-thirds ratio in figuring waga offsets for shorter working times.

Moreover, some belance between tha state and business must he struck since e would profit as a result of addltional taxes, social security contributions and unspent unemployment bonafits, while business would be financially at a disadvantage.

In order to overcome unemployment. the experts call above all for a consistent and growth-oriented economic policy which would not only concentrate on promoting investment, but also on encouraging consumption.

Wilhelm Reinhard New

(Hannoversche Aligemeine, 3 September 1977)



#### **ECONOMICS**

# Record profits for business giants

## DIE ZEIT

his country's turnover glants broke sil profit recorda last year. Combined turnover of companies with sales exceeding 1,000 million deutschmarks increased by 8.7 per cent to just over 500,000 million marks, with profile (after tax but before reserves were aet aside) up nearly 100 per cent from 6,800 to a little over 12,000 million deutechmarks.

Motor manufacturers and civil engineering contractors, made the running, and not by dint of manpower cuts either. Payroll figuree elmost invertably indicate that more staff means higher turnover and profits.

Construction companies among the top hundred did most of their building abroad. Hochtief carried out seventy per cent more construction work abroad than in 1975, Beton- and Monierbeu 84 per cent more, while Philipp Holzmann stepped up contract work abroad by no less than 107 per cent.

The top ten civil engineering firms

accounted for nearly ninety per cent of foreign construction contracts — a total of roughly 12,300 million deutschmarks.

Several leading companies are again not listed because they prefer not to disclose trading figures. They include, for instance, Benteler and Coca Cola. Whet they hope to gain from this reticence is hard to see; it is a mystery even to their competitors.

Other companies, such es Deutsche Marathon Petroleum, were not listed despite turnover in this firm's case of 1,500 million deutschmarks, the reason being that they are mainly traders, not manufacturers.

Classification according to turnover presents problems in any case, with published figures varying substantially from one publication to another. Turnover can be defined in a number of ways.

Many companies issue three different balance sheets, one for the parent company, one for the parent compeny and its domestic subsidiaries in which e majority shareholding is held and a third for group turnovar, profits and peyroli ell over the world.

In the case of Hoechst Chemicale the last-named category includes 466 companies of which 416 are registered abroad.

Since there are no generally accepted niles and regulations of eccountancy governing balance speets for worldwide operations, the figures cannot always be directly compared.

They certainly convey e realistic impression of this country's top 100 companies as they see themselves, however.

Die Zeit, 2 September 1977)

#### Top ten trading companies

	35	ingenir te skirt	1976 turnover p. s. chang in DM millions over 1975	e Trading series
	1	Thyssan Handelsunion	9-302 + 25,9	69.B
	_2_	Stinnes	8 742 + 18.1	42.5
	3	Tospfer	7 765 + 3,4	42,3
٠.	4.	Deutsche Spar	7.286 + 7.0	70.1
,	: 5	Karstadt	7,255 + 2,B	125.0
	_6_	Selax (A & O)	6.933 + 15,4	
	. 7	Klöckner & Co.	6 770 + 13.3	43.8
	_8_	Quelle	6 646 + 6.4	52,4
	9	Kauthof	6 351 + 3,7	-63.2
	10_	Edaka	6 300 + 9,2	8.4

The two trading divisions of larger groups in the top ten came first and second. Rack Keing, Veba subsidiary, as is Stinnes, totalled DM7,043m in turnover last year but came elelend in deduction of DM1,284m in oil duties. For the same reason Aral, whose invitore inclusive of duties totalled D&18,995m and would have rated third place, came fifteently, trailing behind had Aldi and Rewe Zentralle.

		Top ten employers	
		1976 Percentage change	4
_1_	Bundaspost	461 578	-1.6
2	Bundasbahn	390 607	-4.8
3	Siemens .	304 000	+ 2,7
-4	Hoechst	182 980	+ 0,3
5	VW	176 824	+ 3,6
6	Beyer	171 200	+ 1,1
_7_	AEG-Telefunken	161 900	0.1
8	Daimler-Benz	160 863	+ 3,4
_ 9_	Ruhrkohle	140 660	-3
10	Thyssen	139 585	-28

At the end of last year the top ten employers between them employed a payroll of 2.29 million, a neorly ten per cent of the gainfully employed. This figure was down marginally, by 56,171, at M previous year. But these figures are slightly misleading inasmuch as manufacturers include forest and overseas staff. The Bayer group, for instance, employs 171,200 people all over the world at only 64,336 in this country. AEG-Telefunken, on the other hand, employ only 30,100 mills abroad. The increase in Slemens' payroll is due to the takeover of Osram.

## The top 100 firms in this country

Rasing	Company Industry	1275 tu	rnov <i>e</i> r	En-	Profits.**	Payr	oli
976 12	76	in mill- /lans	Sage charge	ports <sup>18</sup> in %	millions 1ioes in 1876 breakstshi1976	at and of 1876	%aga change
1 1	Vebe fuel & power	25 2291	+ 98	is:	259 328	. 87 Q84	- 3.0
2 S	Hoschal chemicels :	23 4857	+ 15	87 -	680 - 291-	· 182 980	+ 0.3
4 10 7	Dalmier-Bane motors	22 493	+18.7 +11.8	. 84 . 58	375 . 607 392 310	112,686	+ 11
8 7	VW III motors	21 423	+18,5	62.3	1004 (167)	176 824	+ 3.4
<b>i</b> i	Beyer charactes	20 880	+ 17.7	88.1		1,5	
7. · · · B	Siemene sleotrice1	20 676	+ .8	51	622 336 606 458	171 200 304 000	+ 1.1 + 2.7
8. 2	Thysees steel	20 387	+ 4.5		275 : 243	139 685	2:8
<b>8</b> '10 10 12	AEC-Talefunken electrical Ruhikohle mining	13 460			352 [107]	161 900	~ Q.1
			+ 17.3	I	453 16.6	140 660	`.— a
11 0 12 11	Mannesmerie Meel & eng.	11 798	10	58	275.8 427.5	108 684	- Q.1
	Ralebottoungsk, engineering	11 458	+ 8 · + 12.1	448	448 392	58 269	- 0,3
14 16	Stach, Shell William	8 802	+18.7		: 92.5 . 62.7- 240.4 82.2	7 D46	- 36 - 22
16 - 14	Fried, Krupp teel & eng.	8 734	+ 4	38	0.6 160,63	76 151	- 3
16 15	Euso et .	9 5574	+20	_			
17 18	Selzgitiar steel & ehigh.	8 859	- 5.6	38	217.8 (67.3) (48) 18	4 844 58 813	- 5.1 - 2.7
18 . , 21 12 22	Pord motors Opel motors	8 657	+36	84	51.8 42.8	62 223	+10
12 24 20 . 17	Bosch strill electrical	6 500°	+ 14.3	18	720:1 48.7	. \$6 000	; # 10 .
			1 1 . 7	200	224.1 188,9	74 100	+ 6.1
21 · 16 22     20	. Atach Hallenge Good	7 235	+ 12,1		82.4 48.5	64 547	2.7
83 %	Majailana chamicais	8 228	+13.5		296 162 16 25	34 707 25 053	<b>-</b> 1,8
24 20	ISM-Deutschland slagtronics	' 6 960	+16	26	796.4 456.5	24 215	+ 2.4 - 0.2
25 20	mention in the first transfer in		+ 6.2	50 E0	75.1 27.4	32 328	÷" 1.6
26 2	Househ - Catembel St. Anal. Ca	6 187		Ι.	4.74	49 976	1 7 00
27 2	Physical Design of the standards of the	4 9811 4 852		\ ''		49 936 4 483	
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36 3		4433	+ 4.	7 i <sub>59</sub> '			.; .
	Chamicale & metal	4253	+18	2 :45.1	40.9 24.8	20 839	- 24 04
33 3		4 218	. +518		184.2 40	3 492	- 8,1
34 63 38 39	Sisch. Teesco   cil Sasjbergwerke fuel & cower	4110			43.4 6.5	6 896	6.3
•		₹ 3 80€	+18.	1 –	13.1 (5.7	29 169	' - 0.1
38 34 37 4		3 808	-I- 4.		92 171.8		
37 41 38 4		3804	+ 29.	2 40	118.7 80.7	3211	·+ 1,7
39 30	CBC electrical	8 442	+ 3	65	37.2 40,4 48 38.0		- 3.2
40 34	Kilickner-Werke steel	3 350	<b>— 1</b>	30	1356 PS	24 934	- 1
41. 43	Oalkes food/shipping	3 300	+ <sup>1</sup> :8 <sup>1</sup>	-	_1 1756	: 100 and	
42 42	Enta Glanseloli chemicale	3 0281	+ 6	١.	15.1 (91,1	16 000	
43 93 44 53		2 850		41 42	13.1	28 901	+12
49 . 48	AEM bower	2 538	* +22. +11.		3.1 10.2		+11.8
48 48				1			
47 49		2 688	-1· 7.1   +17	8 27 .	73 1 60 84 596		+ 0,4
48 '47	FIRMS COM G ON 1	2675	+ 8	el 🛶 i	54 59.6 58.1 38.9		+ 28 - 7.4
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#### **■ TECHNOLOGY**

# All the latest in sight and sound at the Berlin radio show



Never before has Karl Mende, the country's second-largest manufacturer of TV sets, exhibited as many new models at a Berlin radio show. Yet the two that are probably most important ere not for sale.

One ie a colour TV set with a built-in micro-computer, this is a model he intends to manufacture, but he is not yet sure when.

The other is a colour TV specially equipped to handle video data services and the like which is not scheduled to be marketed until 1982.

It is a slack year for radio show exhibitors, of course, with neither an Olympics nor a soccer World Cup to send eustomers flocking to the TV dealers' showrooms.

This year the Berlin radio show is the only mejor sales pltch, and both TV channels are doing their best to publicise it. The Berlin radio show is, after all, undoubtedly the largest trade fair of its kind in Europe, end maybe in the world.

No one would deny that the main purpose of the radio show is to boost sales. Fifty per cent of households in this country have colour TV sets, end nearly—everyone—has hi-fi-or-stereo-equipment.

From 1980 on audiovision is expected to prove the next major market — video, in other words. So the sights are already being set.

Incorporation of a micro-computer in colour TV aete is unquestionably a major advance. Karl Mende may wonder whether he has not been too ambitious, but Blaupunkt and Siemens are already marketing micro-computer models.

Market saturation, says Bleupunkt's Dr Siegle, necessitates a wider range of models, and computerisation merks e new departure in comfort at the upper end of the range.

The major manufacturers' respective ranges certainly testify to a difference in outlook. Bleupunkt and Siemens sell sophisticated models requiring e degree of familiarity with the operating instructions, whereas Nordmende apparently have less confidence in their customers.

Nordmende sets are certainly easier to programme, but at the same time less versatile. Electronic programme selection is limited to nine options that can be preset no more than 24 hours in advance.

Blaupunkt and Siemens micro-computerised sets, on the other hand, can store up to twenty commands given up to a year in advance or repeated dally until such time as the instructions are cancelled.

When Blaupunkt and Siemens acts are programmed an electronic device must first scan the evailable channels to locate programmes.

The Nordmende set does not require this additional feature. If you know what channel local transmissions are acreened on you can diel it direct.

With the Nordmende receiver viewers can dist. by remote control up to 29

channels, whereas Bleupunkt and Siemens only handle nineteen, but with only three programmes from which to choose in most parts of the country this may hardly be felt to metter.

Other menufacturers have resurrected the idea of a picture within a picture, an insert thet fleshes into one comer of the screen to indicate what is on the other channels.

This Idea was tried out without much succees four years ago, and not all manufacturers have joined the bendwaggon.

There are colour receivers with up to three edditional black-end whita screenlets, but some menufecturers feel a swift remote-control change from one programme to another is sufficient.

The picture within a picture is certainly an expensive extra. The difference in price is so great that a second set, a black-and-white portable, could be bought for the cost.

There is an unmistakable trend towards smaller, 46 and 56-centimetre acreena, while 1977 models on average use only half the power consumed by TV sets of a decade sgo.

By and lerge the introduction of

module components has made seta less prone to break down. According to one manufacturer 25 repairs now need carrying out on 100 eets sold within twelve months of sale.

Only a few years ago the correspond-

only a few years ago the consequence of figure was 100 out of 100, which does not, of course, mean that each and every set went wrong et some stage within a year of purcheee; some needed repeining more than once.

Many modele bear witness to a desire to improve aound reproduction, but limits are imposed by the quality of transmissions, which renders hi-fi reproduction imposable.

Amplifiers and loudapeakers are frequently better than might be inferred from the quality of reproduction receivers are obliged to provide.

Quality would appear to have become the rule in stereo equipment. Models that do not comply with hi-fi requirements are few and far between. This is not altogether euronising, since DIN hifl stendards represent a compromise reached by manufacturers which has only

Six months

Massra / Mr / Mrs / Mice



A Vidaotext display at the show

hoter deal

presented difficulties in respect of cassette tape decke.

Hi-fi tape decks call for such complex electronics that they cost much the same es conventional tape recorders of comparable quality (which is easier to schicve with higher tape speeds).

Csssettes, however, sre easier to handle. Jepanese manufecturers are trying to launch e larger casectte which runs et higher apeeds. The quality is undeniably better, but then the price is higher. The new cassette has probably arrived too late to gain a significant share of the market.

Stereo devices with separate tuner, apeakers and record deck are growing increasingly up-market. In the medium and lower price-brackets combined record-players and radioe or tape decks are gaining the upper hand.

The reason is, or so it would seem, that more and more sustemore are growing tired of the festoons of wiring needed to link up the various components.

Most manufecturers still provide quedrophony, but under the counter only, as it were, and few customers bother to enquire, which is, perhaps, hardly surprising.

The broadcasting authorities are partly to blame, eince quadro transmissions are the exception rather then the rule and usually underleken by accident rather than by design.

What is more, however, there are too few quadrophonic records and tapes availeble to make quadro particularly attractive, and many people who heve invested in quadrophony are disappointed because it has not lived up to expecta-

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pear wholeheartedly to prefer stereo recorded with the sid of a synthetic head device, which ensures better quality.

Ambisonic, an all-round sound import from Britain, may yet reign aupreme, although it did not figure prominently at the Berlin radio show.

A number of manufacturers claim that their equipment — in the higher price range, of course — cen be adepted to ambisonic. Maybe the new technique will make its eppearance at the next radio show in two years' time.

Technically it might well knock stereo into a cocked hat, but not mono, which is still adequate for meny purposes. It should certainly prove more then a match for quadro.

The video market is in a state of flux. Despite a disappointing start Telefunken have yet to drop their ten-minute TED video disc, but are eaid to be interested in the VHS video cassettes developed by TVC of Japan. These new cassettes record for up to two hours.

They will, of course, be compating with the VCR cassettee, which both Grundig and Philipe cleim to have stepped up from sixty to 130 minutes. Other manufacturers have followed suit with VCR LP.

VHS should be available in this country by the middle of next year. The quality of ite reproduction of e test card in Berlin was not entirely convincing, but improvements are promised.

JVC will also be launching a new and easy-to-handle VHS video camera which, they claim, could well replace super 8. With the recorder costing 3,000 deutschmarks or eo and the camere 4,000 marks and more this claim seems feirly improbable.

A de luxe version of the VHS camera, incorporating zoom end and an electronic range-finder, will probably cost 1,000 marks more. The two-hour cassette, on the other hand, will cost only sixty marks or so.

CB radio, came, into, its own for the first time at this years. Berlin radio show, it is a market in which Far Eastern manufacturers predominate.

The only device on show that was manufactured in this country was a car radio with CB (Citizens' Band) wavelengths. Domestic manufacturers do not yet seem to know what to make of CB.

But to judge by the US market CB should prove a tremendous growth sector. It will not be cost and intimate in the way that manufacturers claim, however. A number of police forces already tune in regularly.

tune in regulerly.

CB radio, which is not unduly sophisticated, incidentally, seems sure to have a number of surprises in store.

Walter Baier

. ... (Frankfurter Ruaderbaup3 September, 1977)

## Scientists discuss structure of matter at Hamburg symposium

A bout 2,300 years ago Democritus, the Greek philosopher, hit on the idea that everything around us might be made up of a few basic elements.

As far as he was concerned they were four in number: fire, water, earth and air. These four, he believed, are everlasting, indestructible and unchanging. He dalled them atoms, meaning indivisible.

We now know, of course, that Demogritus's four elements are not the last word on the aubject. They are not indivisible. All that remains of his idea is the word atom.

And even the atom can no longer ba regarded as indivisible and has not been since the discovery of nuclear fission by Otto Hahn, a German chemist.

Yet oddly cnough there was atlii talk of the four basic elements of matier at a recent international congress of physicists in Hamburg. Nowadays, however, they are not etoms, but quarks.

More than five hundred scientists from thirty countries spent a week diacussing research into the bosic structure of matter. They were in Hamburg for the international Symposium on Lepton and Photon Interaction at High Energies, which is held every other year.

Maybe it would be es well to start with e thumbnail sketch of what has ticen happening recently es far as acientists specialising in elementary particle research are concerned.

Scientists heve known since the early years of this century that the atom consists of three different kinds of smeller particles: electrons, protona and neu-

Electrons orbit the nucleus like planets orbit the Sun, while the nucleus itself is composed of positively-charged protons and neutral neutrona.

For years physicists have been trying to discover whether these atomic particies, which between them account for virtually the sum total of matter, are not in fact made up of yet smaller particles.

In 1962 a US acientist, Murray Gell-Men, published his theory that these amaller particles do exist. He reckoned there are three kinds of what he called quarks, an artificial word he borrowed from James Joyce's Finnegan's Wake.

in 1969 Professor Gell-Man was awarded the Nobel physics prize for his theoretical work on the subject, but his theories have yet to be scientifically proved as fact.

It was obvious at Hamburg, however, that few, if any, leading physicists doubt the existence of quarks any longer. Over of some far-off Utopia, but which serithe past three years the pattern of evi- ous acientista put forward as definitely dence has grown so closely interlinked within the realms of stark possibility.



that few argumants can be advanced to dispute their existence.

This latest chain of research began with e diacovery made in November 1974 by two other American physicists. Samuel Ting and Burton Richter.

Their discovery seemed to run counter to Gell-Man'a theory inasmuch as it necessitated the addition of a fourth quark, which was dubbed "charm."

But the more the physicists cama to lcarn ebout charm, the more they felt it bore out Getl-Maria theory except in one single reapect, that there ere four quarks, not three.

Tha final link in the chain of evidence evailable to prove the existence of "charm" was one of the three outstanding research results made public at the Hemburg conference.

Physiclats working at the city's clectron synchroton, a particle accelerator known as DESY (which in German is pronounced "Daisy"), have discovered what is know as the F meson, a particle which is phenomenally difficult to prove exists and consists of a charm quark and

S hades of Dick Tracy! Something like the wrist radio that the US comic

strip hero detective uses in his fight

against crime may soon become reality.

of the Hemiann Oberth Association in

it could, within a few years, bc used via

is now about to be made possible. Scien-

tists also hotly debated the question of

how we can leave our aolar system and

This included auggestions which any

laymen today would atili consider as part

to easily talk to each other.

the Milky Way.

Scientists attending the 26th congress

a atrange quark (which are two different kinda of quark).

Tha combinations of charm quarks and the other two varieties, which are known as up and down quarks (for want of a better name), had already been dis-

A second major event at the Hamburg congress concerned not tha heavy elementary particles, the hadrons, but the lightweight particles, the beat known of which is the electron.

Physicists term these lightweight particles leptona, and in recent montha final doubts as to tha existence of a superheavy brother of the electron, the socalled heavy lepton, which is 4,000 times heavier than the electron, have been dispelled.

With the confirmation of the heavy lepton's existence the number of leptons has probably increased from four to six. since a neutron counterpart may be presumed to exist and has been dubbed the heavy neutrino.

The existence of more than four leptons has started physicists thinking, since they tend to feel that leptons and quarks ought to be equal in number. In other words, there would seem to be more than four quarks too.

In Hamburg another American physicist, Professor Leon Lederman, provided

the first pointer to the existence of fifth quark. This, then, was the major discovery unveiled in Hambur

At the Fermi laboratories near Color go Professor Lederman has discovered particle that is ten times heavier than hydrogen atom and boasts properly that can only be explained by assuming it to be e fifth quark.

Lederman'a discovery has yel to k confirmed, but physicists are alma drawing their conclusions. How may quarks are there, they wonder. Will his existence ever be proved individually?

If, for that matter, there are may more varieties of quark awaiting discreery, which Professor Lederman suspen is the case, will they will tum out tok the smallest particles of matter or a they too made up of yet smaller pe-

These queries can only be answered with the aid of still larger research devices. Already the largest particle are lerators in use are four miles in diamference and cost hundreds of millioned deutschmarks

One country alone will soon no ke ger be able to foot the bill of basics search in this sector, although the m generation of eccelerators, Petra is Hamburg and Pep in Stanford, Callornia, will still be built under the aegist individual countries.

Talks are, however, under way with view to international cooperation on the next generation but one, which will be particle accelerators with a circumference of up to thirty miles.

Reiner Korbmann (Hannoversche Allgemeine, 2 September 1917)

## One day we'll have a phone up our sleeves

Berlin this month heard about a new type of mini-telephone, equipped with microphone and transcelver, which can For Instance, Professor F. Winterberg, be strapped to the wrist like a quartz of the University of Nevada, suggested sending a complete self-contained com-Professor Philipp Hartl of Berlin'a munity into Space. In fact his proposal Technical University, said this latest scientific gadget would be useful not only in space travel. Right here on Earth envisaged an artificial type of city contained in a type of saucer with a diame-

ter of one kilometre and 50 metres long. This type of fantastic project showa satellites, to enable 100 million people thet some prophets of what's-to-comein-the-space-travel field are barely abla And thanks to apace technology it is to free themselves from their predisposinot only "total communication" which tion towarda gigantic undertakings.

Be this as it may, Professor Winterberg did not think his apace cylinder would become a reality for another 100 set up communities on other planets in or even 200 years.

Other lecturers concentrated more on finding better and more efficient ways of fuciling future spaceships.

Current chemical fuela in use enable apaceshipa to attain apeeds which are of use only within our known solar aystem.

If one wanted to fly to the nearest star in the Milky Way, for instance, using today's known means of proper sion, one would need hundreds of the sands of years to get there.

Among suggestions at the Berk space conference was the use of electric propulsion units which would enable ionised gas to be propelled at extraord-narily high speed. Scientists also condered the possibilities of atomic propulsion including the fusion rocket - 4 though it will take decades before Man will be able to adequately control it fusion process in laboratories on Earth

Meanwhile, space experts are alred dreaming of achieving the highest speci possible in space: the speed of light Theoretically we already know how to

attain this speed. Matter, joined with to called anti-matter, would be transformed 100 per cent into energy and thereby provide a laser-like light beam to power

But to achieve this, all the energy available on Earth would have to be brought into play - which means that this idea will no doubt remain no more than an idea for e long time to come.

(Frankfurler Allgemeine Zeitzef für Deutschland, 6 Saplember 1917)

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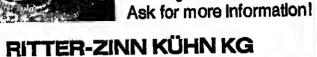
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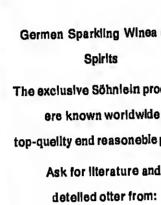
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#### **EDUCATION**

# All universities in Europe should be European in their outlook, say experts

THE GERMAN TRIBUNE

urope is still very much on the aca- dents at the Institut des Hautes Etudes cohesive lecture courses in European dentic agenda, as the Inauguration of Europeannes have, since 1952, been able economics, politics and law forms part the Institute of European Studies at Badia Fiesolana, near Florence, has ahown.

It was inaugurated to the sound of Ministerial acclaim, well staffed and generously endowed. The erstwhile monastery and Renaissance domain of Mat-, are not French. They come from twenty teo Bosso stands a fair chance of becoming a Romantic Idyll of European aca- Africa, Asia and America. demic research.

This Florentine brains trust is by no means the first of its kind in 1949, when Badio Fiesolana was still a religious boarding school, the College of Europe was estoblished in Bruges, Bei-

Bruges hos a yearly intoke of between a PhD thesis in European studies is by 100 and 120 postgraduate students from no means out of the question. at least fifteen countries. This year there are 124 students from 25 European and well over 500 PhD theses on European overseas countries, with students from this country second in number only to various EEC countries some 2,500 dis-

The college fibrary, which is open to visitors as well as full-time students and staff, bossts 80,000 books and periodocals and is rated one of the most comprehensive in the world on matters reloting to Europeon integration. .

in Bruges the languagea of instruction are French and English. In Florence German. Danish, italian and Dutch ore spoken too.

initial intake at Badia Fiesolana comprises 73 research students, with Germans and Italians coming equal first numerically at fourteen each.

Eleven other nationalities are represented, but only the British are similarly in a position to field a soccer team. The 200 postgraduate students in Bruges and Fiorence ali have one aim in common, a diploma in European studies.

Course and methods are inter-disciplinary, with the emphasis on special subjects. Students study not only legal, social or economic aspects of their chosen subject, but also inter-relationships, political repercussions and preconditions of integration.

Both students and ataff benefit from different university traditions, outlooks and methods of study and research, with the result that even without monastery. wails and historic city-centres the two institutes have more in common with the medieval university than with its nineteenth-century successor.

European studies entail a more universai approach than the nationallyonentated, monodisciplimery outlook to which we have grown accustomed over the past century or so.

In addition to Florence and Bruges there ore 69 departments or institutes of European studiea at Common Market universities, although their terms of sions. Eighty-two per cent of those

Oddly enough, Britain and France boast the largest number despite being tion. widely regarded as countries that are ... A similar trend was pinpointed a depredisposed towards placing obstacles in the way of European integration.

What is more the two dozen French institutea and the sixteen British departments include multi-disciplinary and posteraduato courses, which are the exception rather than the rule.

In Strasbourg, at the intersection of Mediterranean and Northern European estional value inasmuch as it improves civilisations, as a brochure puts it, stu- command of foreign languages, broadens

to crown their studies with a European

Here too, in Strasbourg's rue Schiller, many nations are represented. More than half the 63 students currently enrolled countries, and not only Europe, but also

As a rule only between forty and sixly per cent manage to put in the additional research required for a Strasbourg diplomo in European studies; the remainder mske do with o certificate.

The options vary from institute to institute and from country to country, but

In the Federal Republic of Germany integration have made the grade. In the sertations on European affairs were submitted between 1952 and 1976.

The Strasbourg course, which may be considered typical of multi-disciplinary curricula, may be subdivided into four main sections: - the history of Europe and the Euro-

- the administration and functions of European institutions and organisations

within and outside the EEC: - European trade: domestic and foreign trode, agricultural, regional and industrialisation policies and stages of economic integration:

- politica and social scienca with speciai reference to international relations. No such masterpian can be taken to iliustrate the general run of courses that stay within the scope of individual facuities. Course requirements are largely determined in accordance with the personal preference of the head of department. That is certainly true of this

country.

of the University of the Saar and is headed by Professor L.-J. Constantines-

and are held primarily for law graduates, with the emphasia on Community law aspects of European integration.

As a result of university legislation in this country the Saar institute is currently undergoing a transitional phase, however, with the result that the dozen students attending the current course will qualify for neither a certificate nor a dip-

At present neither option is available. in this country.

The Saar institute has been in existence for 25 years. More recently courses in European studies have been inaugurated at the universities of Bonn. Bielefeid, Cologne, Göttingen, Hamburg, Mannheim, Munich, Tübingen and Würzburg.

As a rule they are primarily economics, law or political acience courses. Interdisciplinary cooperation has since 1969 been coordinated by a European ntegration working party.

Founder-members of this association Include Professor Alfred Mülier-Armack, the current president of the working party, and Professor Waiter Haiistein. the first president of the European Commission in Brussels.

The working party now has a membership of roughly 150, lawyers and economists for the most part, but not a single scientiat.

In, say, chemistry and physics, research projects can be coordinated, but European integration of numbers, quantities and molecules is not yet feasible, apologists explain.

Connoisseurs of the European university scene claim that the establishment The sole postgraduate institute with of European university institutes or

## Study abroad regarded as a luxury, survey shows his country runs a serious risk of horizons, fosters personality develop-

Reimut Jochimsen fears.

Professor Jochimsen, state secretary to the Bonn Ministry of Education and Science, voices his anxiety in connection with two survays of the interest shown by students and school-lesvers in a course of study abroad.

The surveys, both commissioned by the Ministry, reach depressing concluwould prove worthwhile, but only five per cent intend to act on this convic-

cade ago in a survey conducted by DAAD, the German, Academic Exgap between word and deed has widened further.

There are good reasons why this is the case. A majority of students agree that a course of study abroad is of edu-

being relegated to the status of an ment and promotes international underintellectual backwater, or so Professor: standing, but these very qualities indicate the drawbacks.

A course of study abroad is evidently regarded as of general educational value, thereby qualifying as something of an academic luxury in the context of degree course and examination requirements.

The general tendency towards a lack of mobility is not due primarily to formal considerations, but to insecurity and anxiety with regard to the future.

Students nowadays, while not objecting to the idea of a samester or two abroad, are worried about the time they may icse, about the additional financial burden, the lack of an immediately discernible benefit in terms of academic or career prospects and the impossibility of. change Service, but in the meantime tha having credits and qualifications gained at foreign universities acknowledged in this country.

Most students anticipate a further deterioration in the already depressing ement to break the bounds of a small-scale ployment prospects for university gradu- rope of the technocrats."

Continued on page 11

complete universities is somewhat de exercise in aleight of nomenclature

In this day and age social, scores and political integration and integration pendence are so widespresd and he ching that all universities in Lang ought to be European in outlook it is claim in any way to be geared to need cal requirements.

It is, they say, antedliuvian to book lawyers with a university training to blandly ignores European law or le la economists without ensuring that is gain on insight into economic circum stances and processes in neighboring

Universities in general musi he iropeanised, the argument runs The must be no more European without eggs, no more European academic e

It is nonetheless acknowledged & such "university "coursea in Europe studies as exist have been respond for a welcome academic mobility will Europe, thereby fostering dialogue k tween opinion leaders, which is my dispensable prefequisite of integration

In other respects mobility has disnished rather than increased, with at educational authority giving prefeat to its own and universities tending impose a ban or ceiling on foreign to

Does this, by any chance, mean is the much vaunted dialogue is virtually an exchange of opinion from w church tower to another, a debste onducted by blinkered bourgeois?

In addition to jecture, seminars, dislomas and dissertations European institutes and academic staff in all countries have apun an internationsi web of compiementary facilities.

Guest lectures are held, colloquiums, symposia and conferences. Periodicals are edited. The various facilities and their integration potential merit academic study for their own sake.

Bruges Week has made a name for h self, benefiting from the patronsge of Europeana by profession, such as la Tindemans, Francois-Xsvler Orles Georg Kahn-Ackermsnn and George Spenale, and of no fewar than five Regian Cabinet Ministers.

Its patrons ensure kudos and publicty, iis academic staff ensure high stand-

Florence, however, is unlikely to proft the training-ground of a future general tion of European officials, Funds are 19 longer as readily available as they out ware for European and international of ganisations, many of which are street overstaffed.

Openings are still available, bui only as a general rule, for Greeks, Spanlank and Portuguese, it would seem is quiries from these countries si is Council of Europe or the Europet Commission in Brussels indicate that they are optimistically preparing for

their ahare of official appointments. The initiators and directors of Euro pean institutes are not mainly concerned to ensure that former students find good jobs with European organisations, how

Fernand L'Huillier, longstanding rector of the Strasbourg institute, taches aubstantial importance to institu tionalised encounters between academis staff and future opinion leaders in the . various countries.

"What matters," he says, "is to form personal links and facilitate a frank in open dialogue across frontiers and but riers of mentality. The objective must be

Jürgen-Klaus von Zaleuse (Deutsche Zeitung, 2 September 197)

## Art critics from all over the world confer in Cologne

rities criticised critics at a recent Ofour-day gathering of AICA, the internstional Association of Art Critics, in Cologne. It was the first time they have ever convened in this country.

Topics discussed, aibeit behind doors closed to the general public, included Theories and Methods of Contemporary Art Criticism, Problems of Realism Todsy and The Expansion of Art.

Contributions were made by art critics from both East and Weat, with critics from the East bioc countries tending to concentrate on resiism.

About one in four of the 180 or so delegates came from the GDR, Poland, Hungary, Yugoslavia, Rumania and the Soviet Union.

The congress was hold in a rolaxed stmosphere, but there was no lack of substantive self-questioning, self-criticism and even ironic fouling of one's

Applause and amused approval greeted Polish critio Mieczyslaw Porebski's views on Critics and Method, in which he outlined the painstaking endeavours the critics' guild to borrow ideas from a plethora of scientific and academic disciplines.

"Sociologists and linguists have been consuited, phenomenologists and logicians, semiologists and ethnologists," he claimed, "Reference has also been made to the theory of information, the theory of play, to substructice, structuralis psychoanalysis.

"At this rate we ahali ourselves become philosophers, epistemologists, ontologists and axiologists in the search for an explanation for our growing impo-

According to Porebski the only critical method that scriously ments consideration is "provocation to stimulate avocation." But can the critic aspire to provocaleur status if, as Potebski weiinigh malignantly claims, he is a voyeur, fetishist, exhibitionist, sadist or maso-

And what can you expect of a critic whose earlier life is described by Porebski in the following grim terms: "His was a difficult childhood, he failed to make it as an artist and now he is a cri-

tic."?
Yet , oddiy enough, Porebski reaches the following conclusion: "For me the crific is first and foremost a player, a headlong player whose sole ambition is to ensure that the game goes on and that others join in."
Dutch critic, H. J. C. farre criticises

the ill-considered conceptual nomerica-ture adopted by his fellow-critics and called into question the approach to art criticism based on thistory of develop-

He noted, and provided dence, that the language of Darwin has spread throughout the creative arts, and demonstrated that like laws of biology prove insufficient to account for artistio phenomenan in the last to the heart that

To lliustrate his point Jaffé examined the term "development", which is widely used in art criticism and art history.

Development in the Darwinian sense of the term is not the same as tradition, which alone applies to history and by Mankind. Combination of and confusion between the two terms leads to results bordering on mystification.

As a means of conceptionalising artis-tic quality, Jaffé felt, both blological and economic (the old and the new) approachea are highly unsuitable.

"Biological development proceeds in accordance with laws governed by genetical factors, whereas creative art, in common with all other forms of human. social activity, is governed by laws that ore dialectical in character.

They are based on the response of the human intellect and imagination to events in Man's environment for which he himself is mainly responsible."

Linguistic outings into other disciplines were not what upset Georg Jappe of Cologne, representing this country. His criticism, in a contribution entitled Methods - Where Are They?, was ieveiled at lack of method and critical substance.

Jsppe systemotically analysed 692 newspaper reports on documents, the Kassei art ahow, and concluded that Hamburg aestheticist Bazon Brock was right in his criticism of documenta critics.

Professor Brock occused on entire generation of critics of abdicating respon-

Jappe defines method not as a coherent system, but os an adequate interpretation. "That," he explained, "is why we ought, for instance, to be interested in whether the most frequently-mentioned artists really scem likely to make art his-

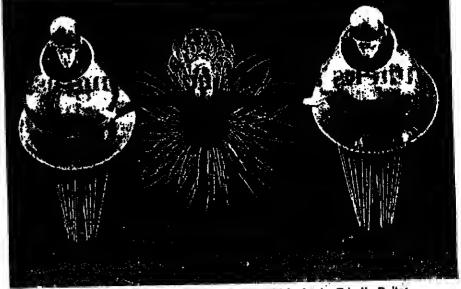
The opposite would appear to be more conceivable, since there is next to no discussion of difficult artists any longer. But what, then, is the purpose of art criticism?"

Fellow-critics, Jappe complained, are stitl predisposed to pass judgment rather than to offer an interpretation, and this, he sald, was as true of critics abroad as of critics in this country. Criticism, he averred, ought also to

encourage promising youngsters and to be objective in its criticism of VIPs among both critics and artists. "We must," he reckoned, "learn how to draw a clearer distinction between individual and object." Last but not least, the trend must not

be towards a handful of critics establishing themselves as taste-makers in small circles and proving difficult id disting guish from private art agents.

Hans Jürgen Papiea and Peter H. Feist, both from the GDR, were very much at one with artistic bigwigs in their own country. fell fact Concerning to tell, fall to make it



Taronca Kalbo, Gisitnda Skrobtin and Ivan Liaka in the Triadic Baitat

Papies deolt with the relationship between the orts and ideology, murshalling sound but somewhat one-sided arguments, while Fcist reviewed the progress of realistic scuipture in the GDR.

Wolfgang Mattheuer, for instance, who rates himself a painter of political paintings, may comply with the prevailing ideology and political proctice in the GDR, yet "by virtue of the entire artistic structure of his work he creates a pictorial model of specific living values in the GDR; he creates ideology and does not merely illustrate It."

Papies likewise asserts that this country's Joseph Beuys combines art and deolugy, albeit not Marxist ideology.

"To this extent structure of an ideological system are indeed apparent, parlicularly since Beuys, in this complexity of his system, would also like to help bring about social change."

This comparison must have come as something of a surprise to Western listeners. Joseph Beuys, a social and art revolutionary, and Wolfgang Motthener, on affirmative socialist realist, cannot so easily be directly compared.

East bloc critics enthusiastically welcomed a worldwide renaissance of realistic painting. Vadim Polevoi of the Sovict Union hailed the renaissance of realism in seventies' art as part of a major historico-artistic process.

"Without venturing to anticipate the shape problems of realism may take in years to come," he declared, "i should like to stress that artistic development must necessarily give rise to problems of realism."

French critic Pierre Restany must have trked the advocates of realism by going on to assert that realism is a metaphor of power.

Werner Krüger (Kölner Stadt-Anzelger, 7 September 1977)

## Oskar Schlemmer's Triadic Ballet shown in Berlin

D auhaus artist Oskar Schleminer's D work is currently undergoing a revival at the Trends of Twenties exhibition sponsored by the Council of Europe as part of West Berlin'a Festwo-

The reconstruction of his Triadic Ballet, premiered in Stuttgart in 1922, was decidedly a new production rather than a revivol, since there are few records of the original chorcography.

So Gerhard Bohner's chorcography. seen by a packed house at the Akademie der Künste, was new, as was Hans-Joachim Hespos' specially-commissioned

Strictly speaking, only the costumes were Schlemmers, copied either from the original costumes in Stuttgart's Staatsgalerie or from photographs and the artists's original designs.

This is a ballet that made art history. The costumes, strictty, stiffly geometrical, determine the choreography. Blzarre spirals and rotating discs are optically striking but restrict artistic leeway where motion is concerned.

Three dancers wearing eighteen costumés in all describe geometrical figures in three sections, each with its own colour scheme: yellow for the cheerful, burleaque, pink for the ceremonial ond black for the mystical, fantastic.

This investigation of the relationship betweeh Man and space based on an idea of Oskar Schlemmer's still ranks as an interesting experiment, or so today's public clearly feels:

(Hamburger Abendblall, 5 September 1977) Selenda da tredition a fift fi

id no different and rather the Continued from page 10.

otes. Further delay will thus be to their disadvantage.

Lack of information about the opportunities, that are available is another problem, "You may accasionally hear of other students who have spent time abroad." Professon Jochimsen explains, but fewer and fewer membars of ocademic staff are encouraging students to cijow suit.

Yet students who have been awarded a university place do not stand to forfeit it by spending time abroad. There are as yet no strict regulations governing the duration of courses, and even if such reguiations are introduced there will still

be the possibility of a sabbatical year. What is more, postgraduate and DAAD grants are available. DAAD, for

instance, had i.8 million deutschmarks in grant allocations at its disp 1967; by 1973 the figure had increased to six million and it currently stands at roughly thirteen million deuischmarks. Undergraduate grants for courses of

study abroad are harder to come by. Less red tipe and a more generous interpreta-tion of grant provisions could work

At any one time roughly 2,500 univer-sity students from this country are stu-dying abroad. The figure has remained constant for years. By international standards the Federal Republic of Ger-

many has slumped from fourth to thir-teenth pisce. Between 1962 and 1972 countries

such as France, Britain or the United States bave doubled the numb students abroad overseas.

"Students would do well to remember that time epent abroad can prove most beneficial at joh interviews," Professor Jochimsen notes

"A year spent in London, Prague ur Uppsala will frequently make a more favourable impression on a potential empioyer than a university course completed in the shortest possible time. agreed and of too, those Rolf Wenker-

(Vorwirts, 25 August 1977)

#### **MEDICINE**

## Doctors discuss causes of heart attacks at Karlsruhe congress



nxiety about the heart sltack hazard A is widespread, and justifiably so. An increasing number of relatively young peopls are auffering heart attacks, many of which prove fatal.

For years there have been pet theories about what causes heart attocks, so much so that whal might almost be termed ideologies have arisen and controversy has raged.

A platform discussion on Tha Heart Attack, Risk Fsctors, Realities or Ideologies? formed part of o recent therapy congress in Karlsruhe chaired by Professor Max Joseph Halhuber, director of Königshöhenried heart clinic.

The discussion was intended to clarify the aituotion, but as it happened it may well have left many doctors who attended even more confused than they were

For years amoking, high blood pressure, s poorly balanced diet, lack of exercise and so-called psycho-social stress have been deerned responsible, in varying degrees and orders of importance. for the increase in heart attack cases.

They are all factors that could, in theory, be eliminsted - if only, that is, wa were capable of coping with our-selves ond others. Thus the heart attack would seem to be a model complaint for elimination by means of preventive

Heidelberg physiologiat Professor Hans Schaefer, a specialist in social medicine outlined in Karlsruhe a provocative set of theories designed to wreak havoc with sccepted views on the

It is far too early as yet to draw up a general theory of the heart attack, hs clsimed. So many inter-related factors are involved and too little is known about their inter-relationships.

Professor Halhuber, ha felt, was taking the easy way out by referring to the WHO definition, which is that the heart attack is clearly characterised by pain and enzyme and electrocardiogram

Professor Hans Erhard Bock, who has held overall responsibility for the therapy congress for mony years, se conded Professor Halhuber, however, by relterating the classic tenet that the heart attack is due to a coronary occlusion or throm-

This classic theory has unfortunately fallen into slight disrepute inasmuch as it forms part of a controversial view held by a medical outsider. Stuttgart internal supporters.

Dr Kern and his somewhat fanstical sssociates draw s distinction between what they call s coronarogenic heart sttack and s myocardlogenic heart attack.

The one is due to coronary failure, the othar lo a failure of the heart muscle, which, or so the Kernites claim, calla for special treatment, particularly a course of strophanthin tablets.

Dr Kern's pseudo-scientific attacks on established theory have wrought much havoc, but they ought not to be allowed drugs as possible, especially during the to result in their more conventional op-

ponents growing equally fanatical in sd-vancing their views.

One established and surely undeniable fi at is that a heart strack is due first and foremost to a discrepancy between supply and demand for oxygen, however

When certain sections of tha heart muscle which must hove a regular oxygen supply to keep up its punishing nonstop work suddenty get too little oxygen they to all Intents and purposes ssphyxiate.

Cardiac muscle cells in the area in question die, causing the attack. Depending on the extent and location of the sttack, the functions of the heart ss s whole may be aeriously impoired.

Oxygen supply is not the able criterion, however, ss Professor Schaefer political out. There are a number of others, although their individual effect cannot ss yet be ascertained.

There are, for instance, the electrolytes, which play a part in the metabolism of heart muacle cells. The first and foremost of these is calcium.

Then there is the way in which nerve stimuli are passed on to the coronaries. which is as yet a complete mystery. All that is known is that the coronary vesaels contract when certain stimuli are passed through the vagues nerve by means of acetylcholin, the carrier sub-

Professor Schaefer is convinced that most coronary thromboses occur after the heart attack, not beforehand. Thus the classic theory explaining how heart sttacks are caused must be abandoned or st least expanded, and not because it is wrong, but because it is too one-sided.

Professor Ebstein from Zürich, s Swiss specialist in social medicine, dealt with a number of sssertions he termed elther wrong or partly wrong. They related mainly to the role of dietary imbalance in causing either heart attacks

It is wrong, he said, to maintain that the causes of arterial aclerosia are unknown, that hereditary factors rather than environmental influences play s crucial part in the causation of heart attacks and that dletary changes, especially in relation to fals, cannol reduce the risk

THE GERMAN TRIBUNE

Professor Ebstein sought in great detail to back up his contention that arterial sclerosia, coronary thrombosis and the various risk factors are to a large extent causally connected.

This, he said, was why he is in favour of retaining the established term "risk fsctor" rather than replacing It with the concept "risk indicator."

Professor Schaefer, on the other hand, was only prepared to class as risk factors those which are measurable in the context of body and soul and can demonatrably be ahown to lead to the complaint in question.

He felt it was important to draw s distinction between risk indicators and more tangible, measurable factors which can be taken as a aure sign that the patient is more likely to suffer from the complaint than might otherwise be the

Professor Schaefer referred in thia contaxt to Swedish work on identical and unidentical twins which came to sn interesting conclusion. Unidentical twins, it sppears, stand the same risk of auffering a heart sttock as anyone else, always sssuming that risk factors were

The influence of classical risk factors is extremely slight where heart attacks among identical twins are concerned. This might seem to indicate that heart attacka are hereditary after all, despite what Professor Ebstein felt.

The Swedish research project certainly oppears to prove that heart stracks can be personality-linked. Thus the risk of suffering from a heart etteck would depend to some extent on the emotional make-up of the individual.

Heart attacks definitely do not come like a bolt out of the blue. There are definite hormone and other biochemical processea that occur simultaneously, consecutively, contrarily and whatever.

As yet they remain to be defined clearly, but s clear definition will prove possible so oner or later. Current lack of scientific clarity is no excuse for making do with conventional, hand-me-down, relatively simple theories to explain how heart attacks are caused.

Wilhelm Girstenbrey (Hannoversche Allgemeine, 1 September 1977) Doctor blames misus ■ PUGWASH CONFERENCE of 'cheer-up' pills for rising suicide rate

DIE WELT

this summer and on syenge the has been one suicide every three on ters of an hour. In the letters they ha left behind suicides have actually me red to the nonstop rain as one of the s sons why they have decided to sale

They also refer to poor employing prospects, to poor prospects of mi peace and to the fact that the work! generat is bad as contributory factor.

Suicides have certainly increased in number of late, and Professor H! Bickel of Berne University attributed increase to the misuse of medicinali are intended to forestall suicide.

"A healthy individual will not com suicide," Viennese suicide apecialistic fessor Erwin Ringel claim, and this is is widely ahsred.

Would-be suicides are invariably t psychic trouble of one kind or anotic The decision is usually taken in a the depression.

There is now a whole range of atdepressive drugs. They work by cheering people up. Professor Bickel has disco vered that most anti-depressives have two-phass effect.

They stort by stepping up psycho-m torial drive, stimulating activity and the powers of decision. Then they cheer the pstient up. So the patient may feel the urge to set before ha feels less depres-

If the worst comes to the world may resolve to commit suicide, He # tainly has the means at his commit An overdose of the pills he has is taken may easily have the desired elfet

Professor Bickel feels the problem! an urgent one because depression is increased by lesps and bounds io red years. According to the latest WHO # tistics between three and five per to of world's population suffer from text ring bouts of depression.

This figure has long been overland Continued on page 14

This year's Pugwash conference mat in Munich. It is a group of sciantists from mora than thirty countries who meet to rsylew probtsms arising from sciantific The weather has been none joe bet progress and tha davelopment of weapons of mass destruction. At Munich dalagates sgreed that disarmament alone will forastsit the danger of a third world

> Sixty-five years ago," Philip Noel-Baker recalled, "I spent some tima in the aun, listening to music and laughter, and in happy friendship with young Germana in Munich."

He went swimming in the Starnberger See, mountaineering near Kufstein ond felt happy in the years leading up to the First World War.

Nowadays Lord Noel-Baker, 88, who was awarded the Nobel peace prize in 1959, is more sceptical of an era that was followed by two successive World

More than 300 delegates at this year's Pugwash conferenca in Munich gava him a standing ovation, but his personal recollections eloquently demonstrated how ineffective good will alone is in bringing about internotional disarma-

Lord Noel-Baker described with note of resignation how he had been associated with the drafting of disarmament treaties in the aftermath of the First World War.

When every final detail had been settled ons solltary superpower boycotted the agreement. It happened to be his own country, Britain, which was more influential in those days.

300 delegates attend this year's

discussions in Munich

"It was strategic nonsense, as we all pointed out at the time," Lord Noeltaker recalled. Ha appealed to the Great Powers to show common aanse now st least, in 1977. "Disband troops and destroy weepons of an offensive nature that serve purposes of aggression."

Such hopes, which have proved lneffective on more than one occasion in history, were the keynote of the first Pugwash public debate, whereaa delegates observed strict silence obout what was discussed in working partles.

They were well advised to do so, or so critica from their own ranks claimed who no longer feel able to hide their diasatisfaction with the current lack of influence of o scientific pressure group that used to be an effective force for

This country's Carl Friedrich von Weizsäcker likewise felt "completely disillusioned" with the Munich Pugwash conference, held exactly twenty years ofter the first conference in Pugwash, Novs Scotia.

Scientists do indeed scent increasingly dissatisfied with what Pugwash has to show for itself these days. Weizsäcker may feel that governments mainly ap-

preciats these gatherings of "eggheads" because they occasionally coms up with Ingenious solutions to specific problems, but Dr Balevski, a Bulgarian delegate, is significantly more self-critical.

Balevski reckons science has much to anawer for in having provided the powers that be with the nuclear button which can end life on Earth as we know it at one fell swoop.

"We scientists will one day have s most uneasy conscience," he said. Balevski is convinced that science is chiefly responsible for the future of Mankind. Bosically anxiety is the guiding prin-

ciple. "Were it not for onxiety, Monkind would be unable to survive," he cloimed, but what a worry for everyone to reolise that o nuclear holocaust would leave no one unscathed."

Welzsäcker, on the other hand, is convinced the Third World Wor would long since hove been waged were it not for the deterrent effect of the nuclear counterstrike option, which he termed ona of the most ingenious stratagems scientiats ever invented."

In today's deterrent balance numerical considerations atill have o major role to ploy, but the qualitative arms race, the race to develop ever more ingenious weapons of mass destruction, is more dangerous by far, Professor Weizsäcker offirmed.

"Lasting disormanient is based on technical equipment which is swiftly ren-

dered obsloicte," he pointed out, adding that in his opinion "the Third World War will begin on the very day the side that starts it la technically in a position

Thus a number of delegates talked in terms of disarmament and were obviously trying to salve their own uncasy consciences. Alexander Markov, head of tho Sovict delegation, sounded a warning note obout the neutron trigger apsrking off nuclear warfare.

Third World delegates, on the other hand, felt concern about entirely different problema "Peace," said Egyptian delegate Abdet Rahman, "has been mentioned a hundred times; justice not

He pointed out that security is very much s matter of justice and fair play. Talk of world peace means no more than that s nuctear holocaust is virtualty impossible. A Soviet delegate sgreed inosmuch as no one could hope to emerga as the victor of a nuclear wsr.

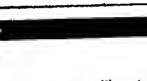
Pugwash delegates from the socialist countries may have been very much in favour of disormament, but they went out of their way to evoid public mention of human rights.

Officially no nication was made of petitions on behalf of a former Pugwssh delegate who is currently in prison in the Sovict Union. Petitions were circulated unofficially.

"There can be no peace without plain speaking," Carl Friedrich von Weizsäcker commented with the East bloc leaders in mind, but he too took good care not to be too outspoken.

He made do with expressing satisfaction that mention had at least been made of the human rights issue.

(Kölner Stadt-Anzeiger, 30 August 1977)



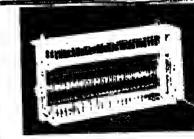
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## Thalidomide lessons have still not been learnt, warns doctor

#### Frankfurter Neue Presse

xicen years after thalidomide the lessons have still not been learnt, claims Frankfurt paedistrician Professor Otto Hoevels.

Opening a refresher course for pharmaciats of Travemunde on 29 August Professor Hoevels noted that drug consumption during the first six months of pregnancy has quadrupled over the past ten years.

Yet since the thalldomide affoir it isaa been generally agreed that pregnant women should be prescribed as few

Towards the end of pregnancy too, he sdded, drug consumption in 1971 was three times higher than it had been in 1961. In his view too little is known about organic processes that take place by a pregnant woman st positively no risk to the unborn child.

Medical acience does not even know, for instance, how the unborn colld disposes of medicine or indeed the role played in this process by the placenta.

Miscarriages may result, the professor pointed out. So msy deformities, growth mpediments or disturbed adjustment to life outside the womb.

As for medicine taken during childbirth, it may endanger the baby's chances of survival, Professor Hoevels claims. The extent of damage done

depends not only on how much of particular drug was taken at what sing of pregnancy, but slso on whether is metabolic affect impairs the child's velopment. The failure to learn the lessons

thalldomlde is not the only disgrace which the professor chose lo rela.

Another is the incidence of death of poisoning smong children. It is, he said, "a disgracsful indicated of lack of readiness on the part of per

ple in our civilisation to learn obvior lessons from the course of events," . . . Every year between fifteen and thing thousand children in this country quire medical attention after awallowing poison of one kind or another. For be tween 200 and 300 of them medical

sistance comes too late. Half take medicines, half take hold hold aubstances such as detergents main reason why such tragedies occur the parents are careless in handling substances.

(Frankfurter Neue Presse, 20 August 1918)

SPORT

#### OUR WORLD

## Hidden water everywhere, but Carl Arens knows how to find it

Pales Sind Sinking

When Carl Arens, 62, from Attendorn, a village in the Sauerland region of Westphalia, goes for a walk he occasionally jerks as though he had collided with an electric fence or trodden on a live wire.

Arens himself is unperturbed. He has known the feeling since childhood. But it is not rheumatism, it is water. Cari Arens is a water diviner.

Were Arens, with his gentle expresslon and pale blue eyes, to try to explain the phenomenon to a hydrogeologist the scientist would probably shake his head In diabelief. There is nothing more un-

But the locals are used to seeing Carl Arens out and about with a forked hazel twig or a pendulum. "The old man is out divining again," they say to themselves, giving the matter no further ttiought.

Most people know what a water diviner is and does, even if they have never aeen one in action. Carl Arens' only concession to modern technology is that he now uses forked rods of metal because the twigs break too easily.

His la an age-old craft, but Arena ia not given to mumbo-jumbo. What is more, he delivers the goods, as he has demonstrated on nearly eighty occasions over the years. His latest find was for a water board in the Ruhr.

Holes were bored at the points he indleated - and up came the water, in aome cases at a rate of 54,000 litres an hour, from a depth of between eighty and a hundred metres (262-328ft).

Carl Arens is particularly proud of this achievement. It is his most successful find ever and, for tha time being at least, a fitting climax to his career.

It all began when he was a boy. Water was running short at the family home in Attendom. The pump in the yard brought up less and less water from an almost empty well.

Arens' father consulted a monk he knew to be a water diviner. The monk pulled a forked hazel twig out of his vestments, walked round the family's land and dld indeed find another well.

Having done so ha threw away the twig. Carl. who had watched the procedure from a distance, surreptitiously retrieved the forked twig and tried bis luck, only to discover that the twie

ly consulted by local people before they, countries. A survey conducted in a Bersank a fresh well. So he decided to lin factory revealed not long ago that combine business with pleasure, served 43.5 per cent of the ataff suffer from his apprenticeship as a toolmaker and manufactured pumps he sold to clients for whom he located water.

He still does, end the family firm Menhattan, the intellectual centre of has a peyroli of seventeen, includ. New York, no fewer than 23.6, per cent ing Carl Arens' two sons, who unfortunately have not inherited their father's talent as o water diviner.

During the war other members of his aurfeit of everything. When it occurs in unit soon learnt what it was like to have its milder form people just feel moody, a water diviner in their midst. While and occasionally, or indeed frequently, they shouldered a rifle at the very least, take a gloomy view of the world. he saw active service armed with no more than a forked twig and a pendu- it recurs frequently and for no apparent

He really made a name for himself in Men and women 1940 and 1942 when he went divining who have tried to not far from home on the recommendation af a nature bealer and discovered veins of heavy metal at a depth of 6,000 metres (20,000ft).

The deposits were so powerful that they nearly knocked him over. The Armaments Ministry rushed a rig to the spot and Carl Arens soon turned out to have located uranium deposits.

When the war was over Carl Arens returned to more peaceful, civilian pursuits. But he had made a name for himself as far afield as Cologne and was frequently consulted by housebuilders.

They were more than happy to know where to sink a well if need by but their main worry was that the house might turn out to be perched on top of a subterranean river or lake, with unforeseen health consequences.

What they wanted, for the most part, was for Carl Arens to divine the course, direction and size of subterranean water resources ao that they knew just where they stood, as it were.

This fear of underground water courses as a health hazard is not such an old wives' tale as you might imagine. Scientists have proved that radiation emanating from the bowels of the Earth is interrupted and diverted by subterranean water courses, with the result that radiation can prove particularly powerful at such pointa.

You can even see the repercussions of these "geopathogenic" zones on Mother-Nature. Tree trunks are full of Irregularities which are, in fact, cancer tumours or trunks are twiated and crippled.

At points where these phenomena ere observed electrical radiation potential of the kind noted by Sir Michael Faraday in 1831 is to be found.

Animals too are Ill at ease on top of an underground water course. Dairy cows were found to give poorer yields in new stables. After a further move their output returned to normal. They had been standing on top of a aubterranean

People too are susceptible to the influence, with doctors diagnosing blood changes, disturbances of the central nervoue system, cardiac upsets and an above-average tendency to contract tu-

get a night's sleep on such spots have complained about mares, tiredness, the shivers and attacks of nerves. Rheuma-

tism is aggravated - the ground is colder, the air, damper. Cold, damp air rises, chills, the aurface of the skin and upsets the circula-

Carl Arens recalls the story of a sixtyodd-year-old lady from Dellbrück, Cologne, whose doctors were, therspeutically speaking, at their wits' end, Radiation. they felt, was the only remaining explanation of her complaint.

A Cologne doctor eventually consulted the Attendom water diviner. Arens reckons the divining fork responded powerfully the moment he set foot in the lady's house.

Dniling revealed a strong flow of water beneath the bedroom floor et-a depth of only 2.30 metres (7ft 6in). The water was diverted, the woman recover-

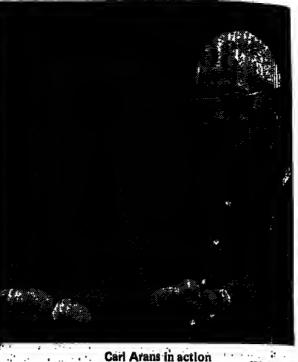
Cari Arena claims to divine water at depths of up to 400 metres (1,300ft) and to help his clients to save money. He once tocated water for a Lüdenscheid firm that saves the company roughly 100,000 deutschmarka a year.

This was the annual water rate the firm had previously pald. The water bill is now zero, the only extra cost that of. the electric power for the water pumps supplied, as it happens, by Carl Arens.

Water divining is hard work, it has always been a strain on Arens, who auffered a heart attack three years ago. His doctor told him to give up divining for . his health's sake (but asked him to do one last job for his medical practitioner before calling it a day).

Carl Arens smiled at this advice and has chosen to disregard it. He still has a their wits' end they all consuit me some divining rod at the ready should the er or inter?. His clients range in need arise, although his wife Erns fre- brewerles and water boards to company quently tells him to throw it away. ... and private individuals.

Arens can understand peopla poking fun at him. What he cannot stand is de-



ceit. There have been people for the he has gone divining, only to be packing as an old fool. Yet there drilled holes at the points ha had a cated - and struck waterl

If he had taken a fee every tink divined water Carl Arens would mot be a rich man by now. But he has to accepted cash payment.

Even so, it tickles his fancy lo in ine that he might long since have be a dollar millionaire if he had chosen use his powers in the desert.

But he now feel he is too old to the up his graft in warmer climes, Besideli would probably ruin his health As iti he is so sensitive to bad weather that) can sense a storm brewing hours below hand. His blood pressure plummels is he feets distinctly nervous.

Arens feels, moreover, that he still work to do in this country. He man pates serious water shortages in the ye ahead and, to judge by the probin that are already arising, his forced seem elarmingly accurate.

He advises sceptics to have a will with a Koblenz monk who is a feller diviner and a member of the wster de nars' association. Arens is a great 100 rer of Fr Tembrok's. "When he led the geologists they stay glued to he -seats," Arens eavs.

Ridicule leaves him unruffled 1 'em laugh," he says. "When they ard

Barbara aus der Wieselt. Könner Stadt-Anzelger, 3 September

The World Cup has been a aubstitute for and may prove a precursor of regular world championshipa, in which case fiere might be a regular annual routine, with the Olympic Games, continental championships, world championships and the World Cup in successive sea-

The pace of life grows more and more hectic, training schedules grow increasingly punishing and it is asking a great deal of amateur athletes to expect them to wait four years from one Olympica to

the next for a chance to crown their cateers with representative internetional Of the four competitions envisaged, the World Cup is the only one that is primarily e team event, so let us take a

despite many organisational mishaps and appears a crowd which grew from one

day to the next evidently felt it was

Will the World Cup be held on a re-

gulsr basis? People wondered at Düssel-

dorf, but an answer is not so easily

given, If, for Instance, amateur athletics

world championships are held, starting

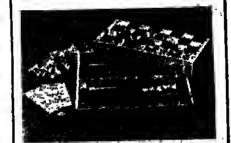
in 1983, the prospect of further World

given value for money.

Cup contests will ba good.

ook at the Düsseldorf results. In the men'a events the GDR came first with 127 points, followed by the

#### THE GAME OF KINGS



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The amateur athletics World Cup United States with 120, this country with 112 and the rest of Europe with 111.

America, Africa, Oceania and Asta

Amateur athletics World Cup may

become a regular event

followed at a respectful distance, so it looked as though national teams were superior to their continental counterparts. They are obviously easier to moti-Yet in the women's events the rest of Europe came from behind in a thrilling

finish to show the GDR girls a clean pair of heels. Which would seem to be est exception to the rule. But the explanation is easily found.

The rest of Europe joined forces with a cleer objective, that of beating the oddson favourites GDR.

There had been ample talk of the GDR beating the rest of the world end suchlike, end the rest of Europe really need to join forces to stend any chence, of beating the GDR's women athletes

The rest of Europe took up the chullenge, with the result that the GDR girls won only five of the fourteen events es against eight et Montreal.

The United States was most unlucky only to come second-best at Düsseldorf With 35 seconds to go to overall victory Mexic Perks, running the last leg of the 4 x 400 metres relay, pulled a hamstring and had to retire.

The GDR won the World Cup as a result, and even this country stole a narch on the opposition, winning the relay and an extra nine team points to outpoint the rest of Europe by 112 pointa to 111.

At all evente the United States lost, whether unluckily or not, to the GDR, and thie mishap is sure to trigger an impassioned debate on the other side of the Atlantic. Uncle Sam will have no intention of being trounced again by what, in comparison, is a pipsqueak GDR.

Philosophising about luck and bad luck is scant consolation for the rest of America, Africa, Oceania and Asia, however. As also-rena they could be excused for wallowing in resignation.

Yet Herb McKinley of Jamaica, former Olympic gold, medallist and Rest of America team official, surprisingly

daimed that team epint, friendship and fair play in his team were outstanding.

The World Cup, be reckoned, was wonderful. Yet the team representing the rest of America were a mixed bag, including athletes from countries as far apart politically as Canada, Cuba and

Third World athletes may have aeen much of the action from behind the rest of the fleld, but lhey too had their triumphs. Perhapa the happlest victor, excepting maybe Irena Szewinska, the 31-year-old grand dame of Polish track ethletics, was Miruts Yifter, the diminutive Ethiopian long-diatance runner.

He won both the 5,000 and 10,000 metrea finishing both events with a burst of apeed that was a sight for core cyes. There can be little doubt that he and his fellow-athletes from East Africa will sonn be setting entirely new stand-

ards in the long-distance disciplines. The World Cup may have been pri-! marily a team event but individuel performances undeniably stood out. The US sprint relay team ect up a new world re-

Miruts Yifter in the 5,000 metres, Ed Moses in the 400 metres hurdles and Irena Szewinska In the 500 metres narrowly falled to follow suit.

In the men's 800 metres the contest between Alberto Juantorena of Cuba and Mike Boit of Kenya proved a real thriller, while high-jumpers Rosemarie Ackermenn and Rolf Beilschmidt and pole-vaulter Mike Tully similarly just falled to scale naw world record heights.

Robert Hartmann

(Stullgarter Nachrichten, 6 September 1977)

## Sprinter Annegret Richter wants Wolfgang Thiele as her trainer

The Amateur Athletics Association will not bow to blackmail." AAA president Professor August Kirsch announced at a World Cup reception in Düsseldorf.

This comment was in response to 1 September press reports that Olympic 100 metres gold medallist Annegret Richter may consider postponing retirement until the end of next season. which is a European championships

But she will only consider doing so what prompted an ashen-faced response from athletics officials to news that might otherwise have cheered them.

In a nutshell, the Dortmund girl is only prepared to carry on for a further season provided coach Wolfgang Thiele, who currently trains the men sprinters. is allowed to coach the women too.

Thiele, who has just qualified as an athletics instructor at the Cologne sports academy, is the men to whom Annegret Richter reckons to owe her Olympic

She stated her terms during the finals of the European Cup in Helsinki, telling officials lise Bechtold and Otto Klappert. Annegret feels ahe must bave Wolfgang Thiele as her (and her teammates') trainer. "If he is given the job I shall carry on

The 10,000 metric event at Düsseldorf

under eleven seconds.

(Photor Wilfried Witters)

of the GDR, who holds the 100 metres world record of 10.88 seconds. Annegret Richter feels humiliated that Marlies Oelsner benefited from Ideal onditions to become the first woman in the world to run the 100 metres in

ninning for one more season," she says.

convinced that only he can motivate her

for a further duel with Marlies Oelsner

"Annegret," trainer Thiele noted in Düsseldorf, "is keen to prove that she is better than Marlies Oelsner."

As yet AAA officials are most reluctant to meet her terms. They feel obliged, "in the circumstances," to back the

currents fining: Jochen Spilker, even though his is sereed not by have many with much success this settion.

Their decision wills doubtless depend to omic extent on the pressure of public opinion. The officials are unlikely to announce their decision before October. In the meantime Annearet Richter,

Jupp Müller

(Kölner Stadt-Anzeiger, 2 September 1977)

### Continued from page 12

From then on young Carl was regular- by events, certainly in the industrialised. "repeated bouts of depression for no apparent reason,"

Of the total population of midtown were recently found to be depressive.

Depression, experts agree, is a typically paradoxial reaction to affluence and a

Moodiness becomes depression when

no logical relationship to the patient's heral practitioners, who are often

head of the psychiatric clinic at the Free of dealing with depressive patients.

University, West Barlin, reports that one of dealing with depressive patients. University, West Barlin, reports that one forestalling suiolde bids at least. person in aix who suffers from depression to an extent requiring treatment dies by his or her own hand.

Depression is nowadays regarded as a

A characteristic feature of chronic depressive drugs, he pression is that it is endogenous, ocur and prescribed in quantities insufficient who live on their own reason. Women who live on their own ig and a penduit recurs frequently and for no apparent probably suffer most frequently from reason or when the reason stated bears bouts of depression, but old see pendo

ners in general, and intellectuals, likewise frequent sufferers. Numbers can only be estimated. Suicide rate as paychiatriats repeatedly fament

victims of depression are treated by a position to appreciate the set of the complaint

Professor Blckel has tone imme suggestion to make from his in cesafully taking an overdose.

# psychic disorder that can have catastro—The right treatment is another in phic repercussions. Professor Helmchen, Specialists each have their own in

